

192/76-24

DEPARTMENT OF THE INTERIOR

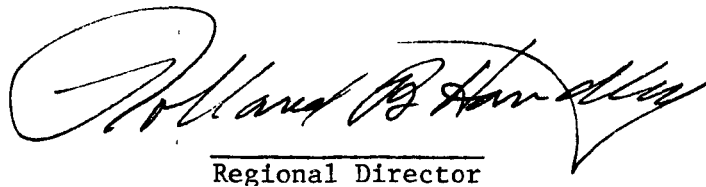
FINAL
ENVIRONMENTAL STATEMENT

76/24

Proposed
Inclusion of the Rio Grande in the
National Wild and Scenic Rivers System

Prepared by

South Central Region
Bureau of Outdoor Recreation
U.S. Department of the Interior
MAY 04 1976


Regional Director

Color Scans
11/17/2003

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Denver, Colorado

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SUMMARY

() Draft

(X) Final

Environmental Statement

Department of the Interior, Bureau of Outdoor Recreation

1. Type of action: () Administrative (X) Legislative

2. Brief description of action:

The Rio Grande Wild and Scenic River Study was conducted pursuant to Section 5(a)(20) of the Wild and Scenic Rivers Act. Legislative action is recommended to include a 191.2 segment of the Rio Grande, from River Mile 842.3 to River Mile 651.1 and a minimum of 9600 acres of adjacent land in the United States in the National Wild and Scenic Rivers System under the administration of the National Park Service.

3. Summary of environmental impact and adverse environmental effects:

Inclusion of the 191.2-mile segment of the Rio Grande and 9,600 acres comprising its immediate environment in the National System will have an overall effect of preserving the existing recreational, biological, geological, cultural and scenic values of the river. Adjacent lands would be retained in their existing condition. Commercial and residential use within the proposed area that might otherwise occur would be precluded. Mineral extraction would be controlled.

4. Alternatives considered:

In addition to the proposed action, other alternatives considered were (1) no action, (2) protection through State and local action, (3) inclusion of different segments within the National Wild and Scenic Rivers System, (4) inclusion in the National Wild and Scenic Rivers System with joint Federal-State administration, (5) inclusion in the National Wild and Scenic Rivers System with State administration.

5. Comments have been requested from the following:

- | | |
|--|--|
| *Advisory Council on Historic Preservation | *State of Texas |
| Department of Agriculture | *Office of the Governor |
| *Department of Defense | Division of Planning Coordination |
| Department of Commerce | *Texas Bureau of Economic Geology |
| *Environmental Protection Agency | *Texas Parks and Wildlife Department |
| *Department of Health, Education and Welfare | *Texas Historical Commission |
| Department of Housing and Urban Development | *Texas General Land Office |
| Department of the Interior | *Texas Water Quality Board |
| *Bureau of Indian Affairs | *Texas Water Rights Commission |
| *Bureau of Mines | *Texas Water Development Board |
| *Bureau of Reclamation | *Middle Rio Grande Development Council |
| *Fish and Wildlife Service | Permian Basin Regional Planning Commission |
| Geological Survey | *West Texas Council of Governments |
| *National Park Service | *West Texas Chamber of Commerce |
| Department of State | *University of Texas |
| *International Boundary and Water Commission | Rare Plant Study Center |
| *Department of Transportation | *Interested Individuals and Organizations |
| Water Resources Council | |
| * Comments received and attached | |

6. Date statement made available to CEQ and the public:

Draft: April 16, 1975

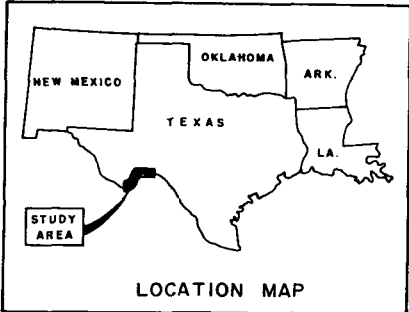
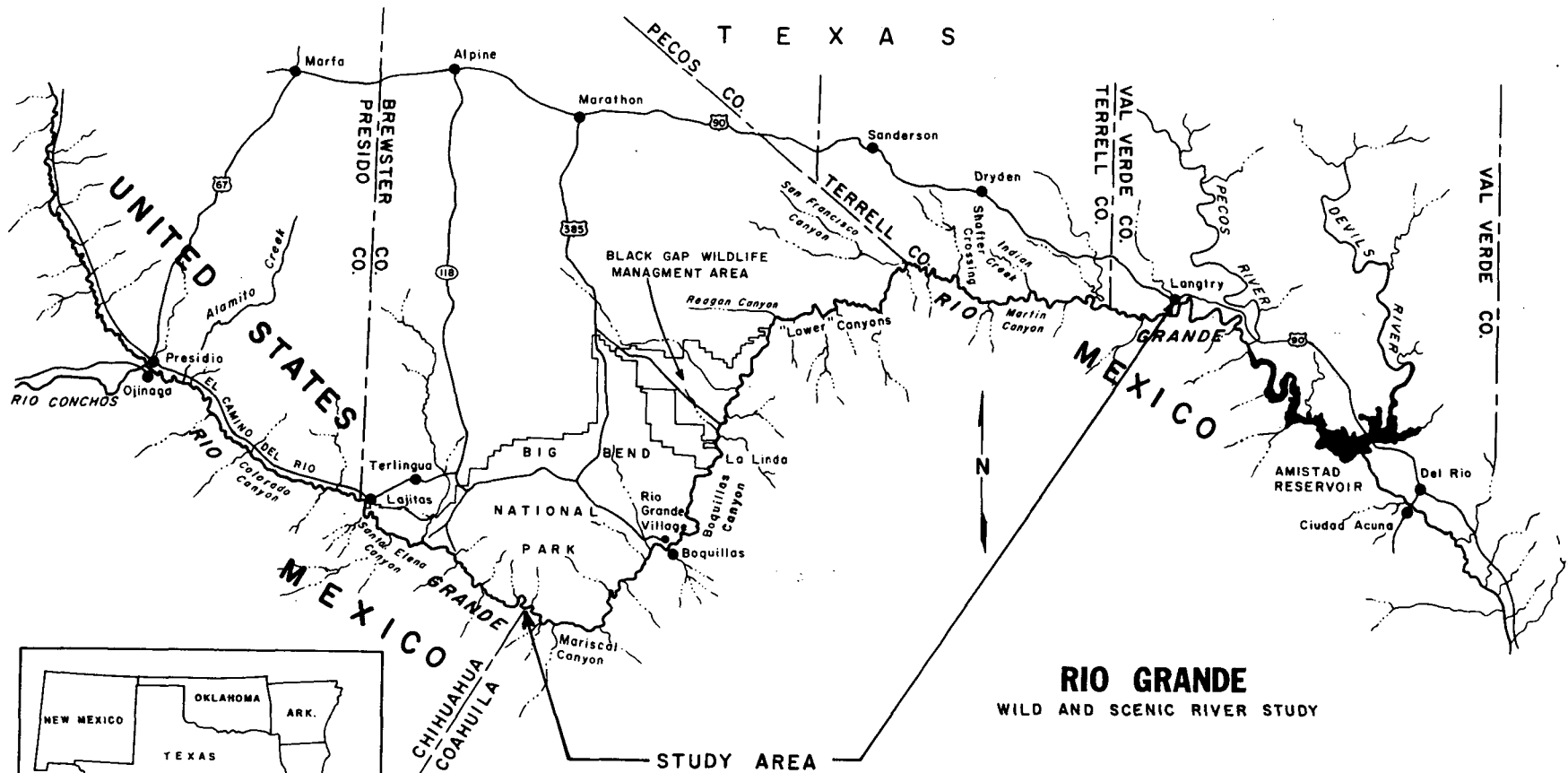
Final:

MAY 04 1976

TABLE OF CONTENTS

	Page
I. <u>Description of the Proposed Action</u>	1
Proposal	1
Purpose	2
Proposal Area	4
Administration - Management	7
Interrelationship with Other Projects and Jurisdictions	11
II. <u>Description of the Environment</u>	15
Regional Setting	15
Climate	15
Population and Economy	16
Transportation	18
History	20
Archeology	24
The Rio Grande and Its Setting	27
Flow Characteristics	27
Water Quality	32
Water Rights	35
Treaty Considerations and Water Resources Development	36
Access to the River	39
Geology	41
Mining	45
Soils	48
Vegetation	50
Fish and Wildlife	56
Land Ownership	60
Land Use	62
Recreation	66
Existing Use of the River	66
Projected Use of the River	66
Facilities	68
Limiting Factors	73
Potential	74
Probable Future Environment Without the Proposal	76
III. <u>Environmental Impact of the Proposed Action</u>	78
Impact on Recreation	78
Impact on Land Ownership	79
Impact on Land Use	80
Impact on Water Quality	81
Impact on Scenic Quality	82
Impact on Soils and Vegetation	83
Impact on Fish and Wildlife	84
Impact on Water Resource Development and Water Use	85
Impact on Historical and Archeological Features	87
Impact on Transportation	87
Impact on Local Economy	88
Impact on Mining	89

	Page
IV. <u>Mitigating Measures Included in the Proposed Action</u>	91
V. <u>Unavoidable Adverse Environmental Impacts</u>	93
VI. <u>Relationship Between Short-Term Use of the Environment and Long-Term Productivity</u>	95
VII. <u>Irreversible or Irretrievable Commitments of Resources Which Could be Involved in the Proposed Action</u>	96
VIII. <u>Alternatives to the Proposed Action</u>	97
No Action	97
Protection Through State and Local Action	98
Inclusion of Different Segments in the National System	99
Inclusion in the National System With Joint Federal-State Administration	102
Inclusion in the National System With State Administration	103
IX. <u>Consultation and Coordination With Others</u>	105
Consultation and Coordination in the Development of Proposal and Preparation of the Environmental Statement	105
Coordination and Review of the Draft Environmental Statement	106
Summary of Correspondence Received Following Review of the Draft Statement	106
Summary of Changes From Draft Statement	107
Correspondence Received	108-197
X. <u>Appendices</u>	
Glossary	198
Status of Endangered and Threatened Species or Candidates for Listing in Study Area	199
MAPS	
Area Map	iv
Potential Access and Development	10
The Rio Grande as an International Boundary	12
Population Distribution	17
Regional Transportation Network	19
General Soils Map	49
Big Bend National Park	69
Topographic Map	back cover
FIGURES	
Classification	3
Visual Corridor	6
Vegetation Profile	54
Comparison of Proposal and Segment Options	100



RIO GRANDE

WILD AND SCENIC RIVER STUDY



NOTE

LEGISLATIVE STUDY BOUNDARY ON EAST IS TERRELL-VAL VERDE COUNTY LINE. LANGTRY WAS USED IN FIELD INVESTIGATIONS AS AN EASILY IDENTIFIABLE SITE.

I. DESCRIPTION OF THE PROPOSED ACTION

PROPOSAL

This statement concerns a proposal which recommends that the United States side of the Rio Grande from River Mile 842.3 to River Mile 651.1 be included in the National Wild and Scenic Rivers System under Section 2(a)(i) of Public Law 90-542. Legislative action is recommended to include a 191.2 mile river segment and a minimum of 9,600 acres of adjacent land in the United States in the National System under the administration of the National Park Service. This statement reflects the proposal for the United States side of the river.

The segment recommended for inclusion in the National System extends from River Mile 842.3 (the Chihuahua=Coahuila state line, approximately 16 miles upstream from Mariscal Canyon in Big Bend National Park) to River Mile 651.1 (the Terrell-Val Verde County line). The segment is to be classified in five reaches, two as "Wild river areas" as defined in Section 2(b)(i) of the Wild and Scenic Rivers Act of 1968 (Public Law 90-542) and three as "Scenic river areas" as defined in Section 2(b)(ii) of the Act. (Definitions of Wild and Scenic river areas are included in the Glossary.) The reaches are to be classified, designated and administered as follows:

- Segment A: Scenic - from River Mile 842.3 to the Boquillas Canyon Overlook (45 miles)
- Segment B: Wild - from the Boquillas Canyon Overlook to Stillwell Crossing (25 miles)
- Segment C: Scenic - from Stillwell Crossing to Reagan Canyon (30 miles)
- Segment D: Wild - from Reagan Canyon to the confluence of Indian Creek (70 miles)
- Segment E: Scenic - from Indian Creek to River Mile (651.1 (21 miles)

It is recommended that the proposed river corridor be administered by the National Park Service on the United States side of the river. A detailed management plan for the river corridor and detailed lateral boundaries would be filed with the Congress within two years of inclusion of the river in the National System.

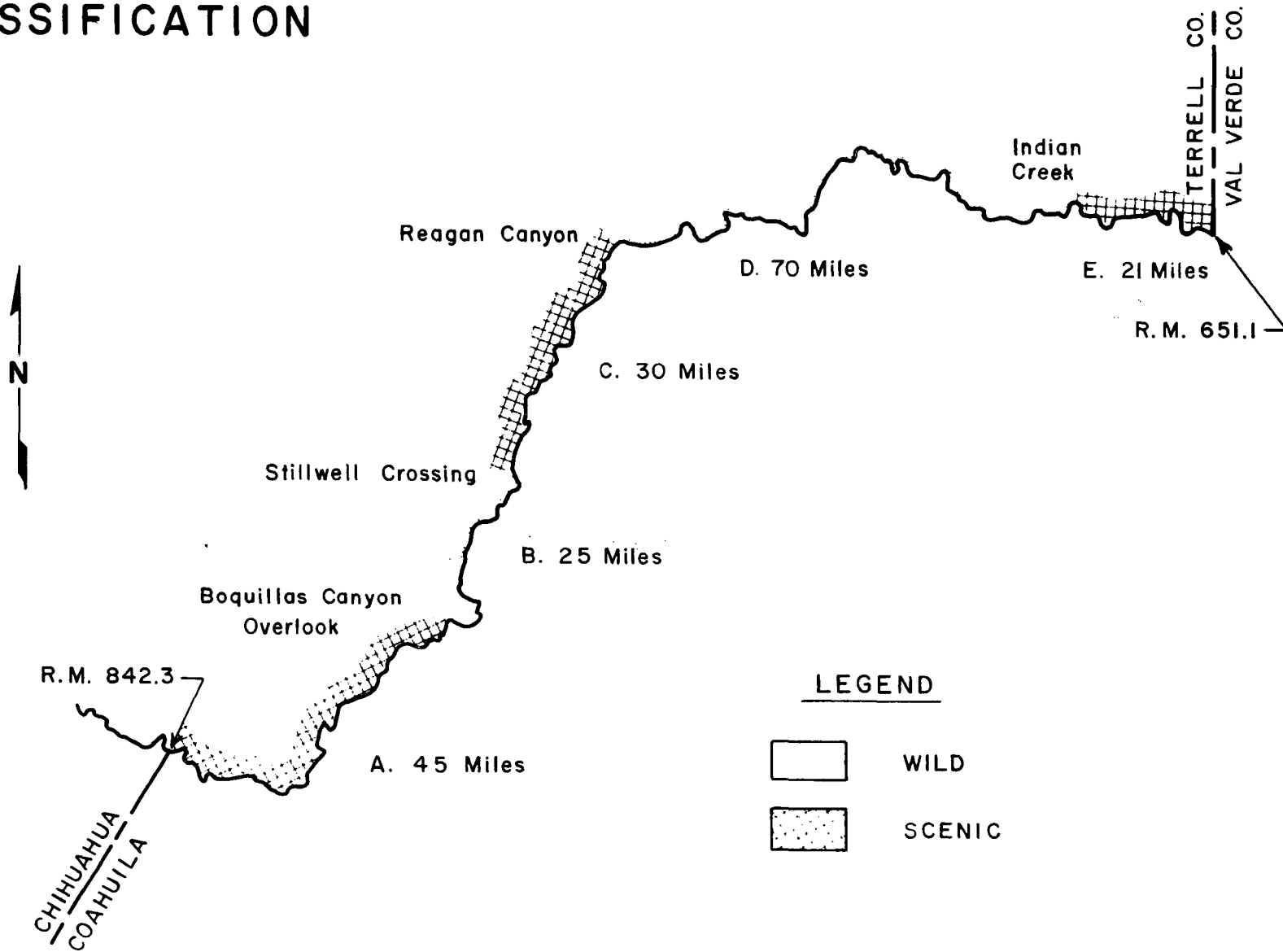
The proposal was developed in response to the Wild and Scenic Rivers Act which designated a portion of the Rio Grande for study as a potential addition to the National System. The proposal is a result of the study called for by Section 5(a)(20) of the Act.

PURPOSE

Objectives under which the Rio Grande Wild and Scenic River will be managed are to:

1. Preserve the river in a free-flowing (see Glossary) condition except as provided by treaties.
2. Protect scenic, geologic, fish and wildlife, archeologic, recreational, historical, cultural, scientific and other similar values along the riverway.
3. Preserve the essentially primitive character of the river canyon area.

CLASSIFICATION



4. Maintain or improve existing water quality.
5. Provide opportunities for river oriented recreation which are dependent on the free-flowing condition of the river and which are consistent with the primitive character of the surroundings and do not conflict with other river protection program objectives.

PROPOSAL AREA

The proposed Rio Grande Wild and Scenic River is located in southwest Texas and forms a portion of the boundary between the United States and Mexico

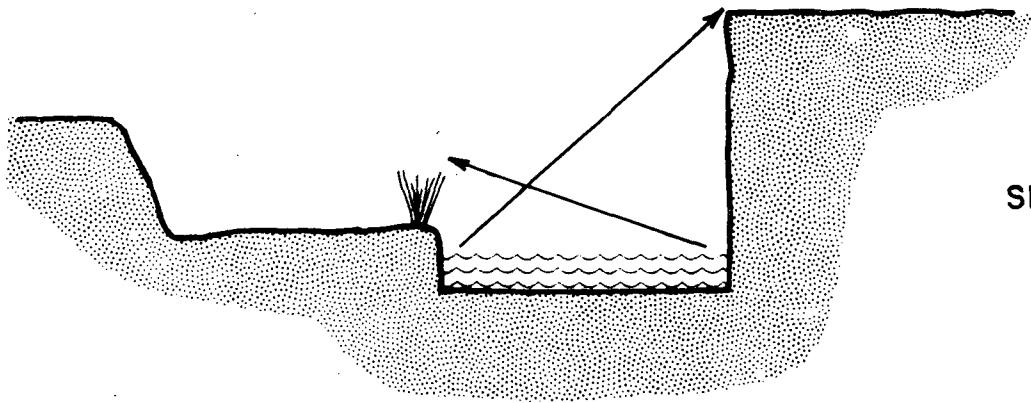
The recommended river segment extends from the Chihuahua-Coahuila state line at River Mile 842.3 to the Terrell-Val Verde county line at River Mile 651.1, the approximate headwaters of Amistad Reservoir, a total distance of 191.2 river miles. Lateral boundaries for the recommended river segment will be delimited by the National Park Service upon inclusion of the river area in the National System. Lateral boundaries will protect the scenic, esthetic, recreational, fish and wildlife, archeologic, scientific, and historical values of the river from adverse influence and activities.

Lands adjacent to the river on the United States side on which land use control and management programs would be established are defined as the resource management area. The resource management area contains the minimum acreage necessary to protect the values which enable the subject river segment to qualify for inclusion in the National System. A minimum of 9,600 acres, excluding lands in Big Bend National Park, would be in-

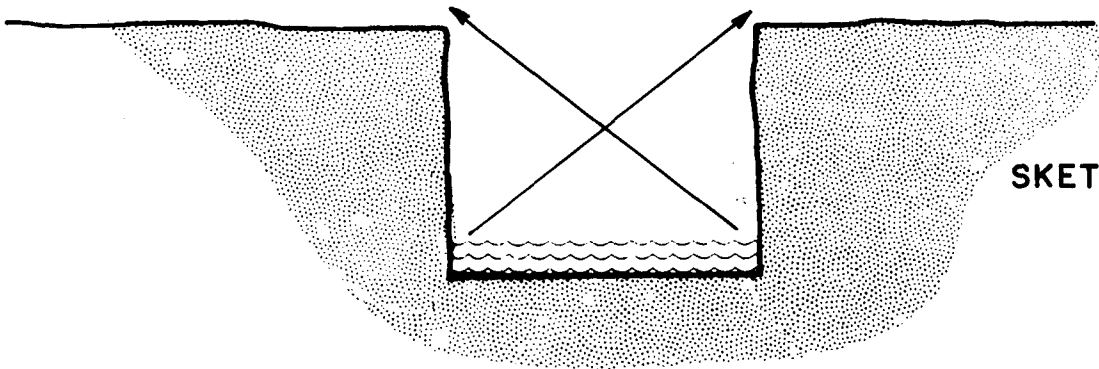
cluded in the resource management area. It is estimated that a minimum of 1,950 acres would be acquired in fee simple title (see Glossary) with 5,500 acres controlled by less-than-fee or scenic easements (see Glossary). Approximately 2,150 acres of the resource management area lie within the Black Gap Wildlife Management Area and cooperative agreements with the State of Texas will be necessary to include such lands in the proposed wild and scenic riverway. These figures are estimates and it is expected that the National Park Service will refine them when a master plan is prepared. Average fee acquisition is approximately 10 acres per mile with average easement acquisition approximately 29 acres per mile.

The determination of the minimum acreage necessary for the resource management area is based primarily on two factors, the "visual corridor" and the desire to include outstanding natural, historical, or archeological areas outside of the visual corridor.

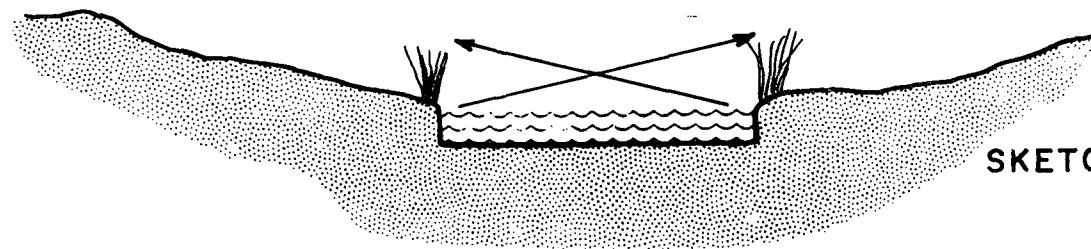
The visual corridor is defined as the zone of adjacent land which has a visual impact on the river user and which should be protected from adverse use and development if the natural and scenic appeal of the riverway is to be retained. The width of the visual corridor varies depending on the height and angle of slope of adjacent riverbanks and bluffs, and on the amount of vegetative cover near the river's edge. Where canyon walls lie near the river, the land area subject to control would be immediately beyond the canyon rim. Where the river valley is broader and riparian vegetation determines the river user's perception of the corridor, only a narrow strip of land adjacent to the river is included in the visual corridor.



SKETCH 1



SKETCH 2



SKETCH 3

Typical Valley Cross Sections

VISUAL CORRIDOR

Rio Grande Wild and Scenic River Study

Although falling outside of the visual corridor several areas of notable natural, historical or archeological values are included in the suggested resource management area. Inclusion of such areas is based on a desire to protect outstanding areas which possess the potential to enhance the river users experience. The resource management area was expanded in some instances to provide protection for areas which, if adversely developed, could significantly affect desirable qualities contained in areas which fall within the visual corridor.

The proposal includes the bed of the river which, except for that portion adjacent to Big Bend National Park, is in State ownership, to the center of the channel. That segment adjacent to the Park was transferred from the State to the Federal Government when the National Park was formed. From the center of the channel to the Mexican side is property of the Government of Mexico. There are approximately 170 acres of stream-bed in Federal ownership while the State owns approximately 1,375 acres within the proposal.

ADMINISTRATION - MANAGEMENT

Wild and Scenic River management will be directed at protecting the values which make the Rio Grande outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting.

The management plan will be prepared by the National Park Service within two years after the Rio Grande has been included in the National System. The Rio Grande forms the boundary between the United States and Mexico; therefore, management objectives must be consistent with the provisions of the treaties between the United States and Mexico relating to the

boundary and to the utilization of the waters of the river by the two countries.

Within the resource management area property rights will be acquired to provide stringent protection of the natural scene and to accommodate existing and potential recreational use. Fee acquisition will be confined to acreage needed to provide access and services to the general public and to protect the river and resource values which would be jeopardized by less-than-fee control. Other land areas within the visual corridor needed as part of a buffer zone will be controlled through scenic easements or less-than-fee acquisition. No development, including access points, will be located on these lands. A scenic easement is an agreement or series of agreements whereby a landowner binds himself and all future owners of the land to refrain from using or developing his land in ways which would detract from the scenic beauty of the area. Such an easement permits an owner to retain use and possession of his land, subject to the restriction that the scenic character of the land remain unchanged. A scenic easement would not grant rights of ingress or egress to the general public. Land use control through scenic easement acquisition normally entails extensive negotiation with the landowners and requires thorough investigation before any agreement on the extent of such control for each tract can be reached. Section 15(c) of the Wild and Scenic Rivers Act defines a scenic easement as:

"...The right to control the use of land (including the airspace above such land) within the authorized boundaries of a component of the Wild and Scenic Rivers System, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement."

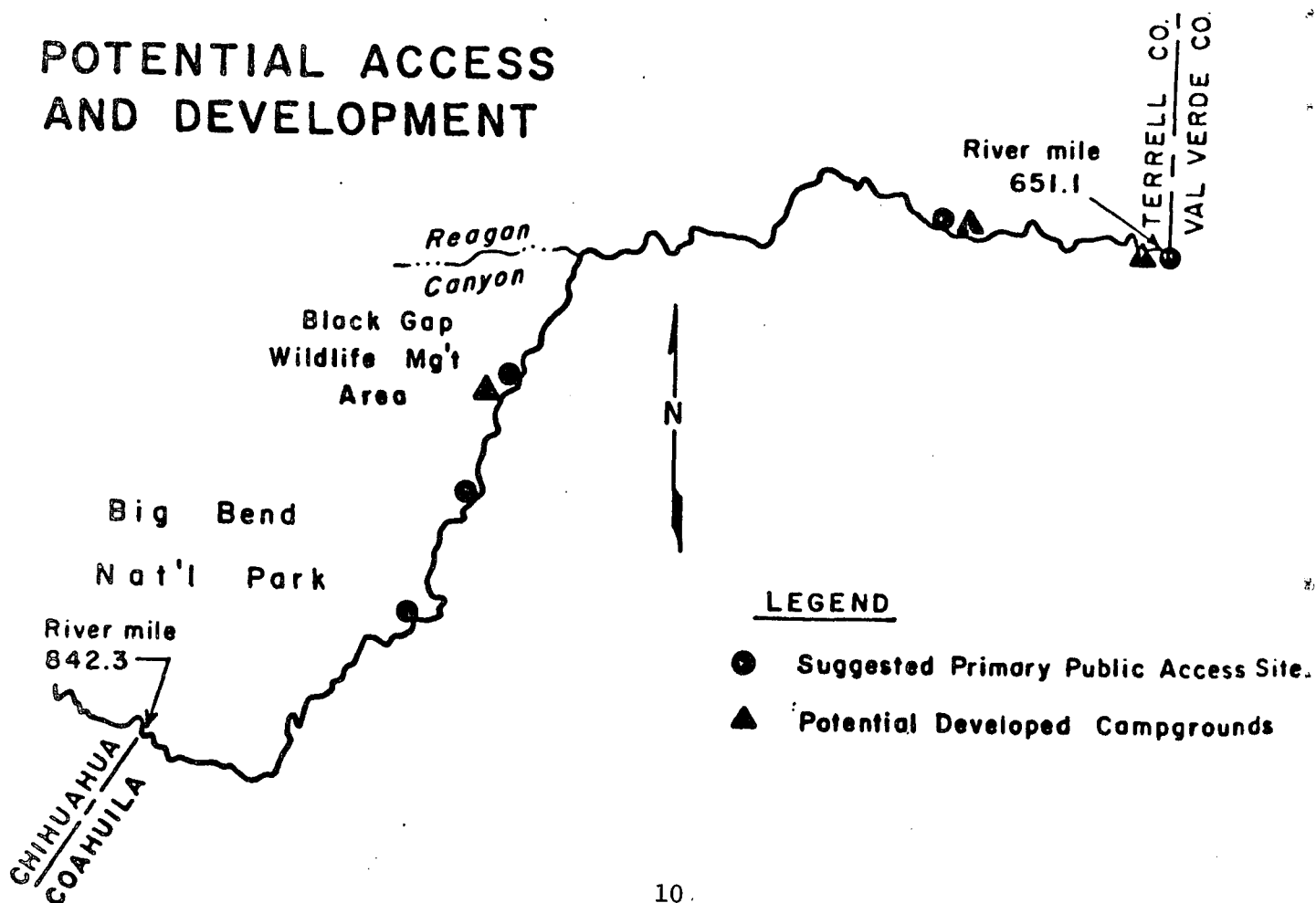
In order to protect the river environment and provide opportunities for river oriented recreation, suitable recreation facilities will be provided. The actual type and extent of such facilities would be determined by the National Park Service, and would be outlined in the master plan eventually developed regarding specific management programs and policies on the designated river segment.

Any developments will be carefully weighed as to the possible consequences on the natural character of the river. Future resource managers would recognize the possibility of environmental degradation by recreational overuse as well as by unplanned commercial and residential use. An analysis of recreation use will be undertaken after riverway establishment to develop optimum river use levels, and management guidelines will be established accordingly. A detailed inventory of historical, archeological, geological, biological, and other similar areas will be made, and a program developed for their protection and interpretation within two years after riverway establishment. Public access will be provided only at a limited number of points on the river segment being managed. Public use facilities adjacent to the river at high and repeated use areas would be provided only to the extent that they are necessary to protect the river's resources from degradation by overuse. All recreation facilities will be designed and located so as to protect the significant values for which the river is established. Major public use facilities such as large campgrounds, interpretive centers or administrative headquarters will be located outside of the immediate river environment. Special care will be taken to protect threatened and endangered species, especially the American Peregrine falcon.

Additional public access points will be provided at several points along the study segment. Such sites would be located near the downstream

boundary of Big Bend National Park, near Dryden Crossing and in the vicinity of the Terrell-Val Verde County line. These additional access points would allow river trips of various lengths and degrees of difficulty. Developed camping facilities will be provided at the access points to allow river users more flexibility in timing river trips. Primitive camping sites along the riverway will not be established until use levels demand such action. A system of periodic evaluation and monitoring focused on the outstanding values and more sensitive elements of the river environment will be developed to determine when and where additional facilities may be appropriate.

POTENTIAL ACCESS AND DEVELOPMENT

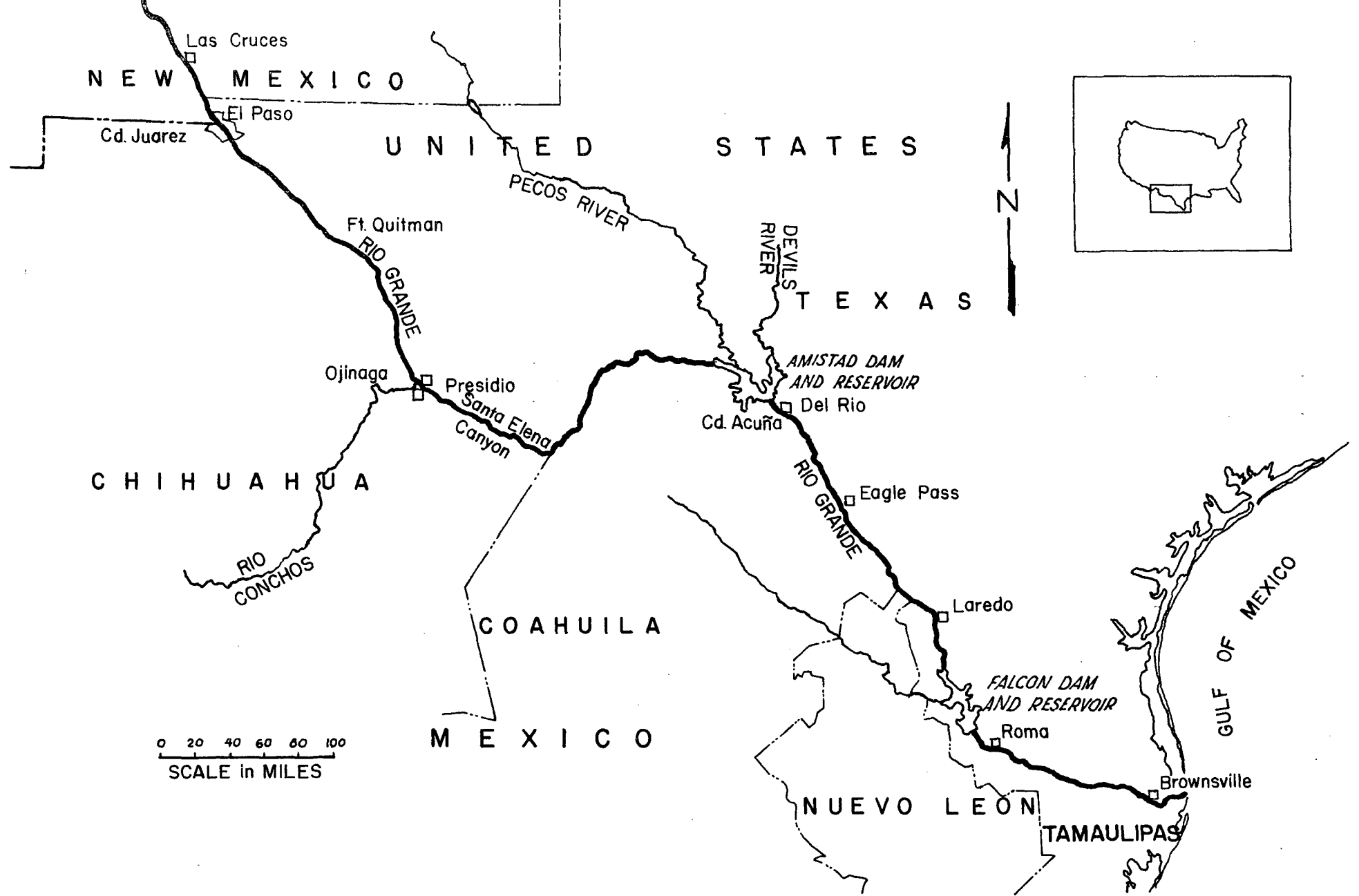


INTERRELATIONSHIP WITH OTHER PROJECTS AND JURISDICTIONS

The Department of the Interior, through the Department of State, has discussed the study and the recommendations with the Governments of Mexico. The Government of Mexico advises that it has no objections to the report recommendations. Further, no conflicting future developments are anticipated on the Mexican side of the study segment. The Mexican Section of the International Boundary and Water Commission advises that the Mexican side of the river in the study region is isolated and uninhabited and is in a naturally wild and scenic condition. The Mexican side of the river is expected to be preserved in its present condition for a prolonged period of time.

The Wild and Scenic Rivers Act requires that river studies authorized by the Act be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act. Presently, no such planning effort is taking place in the proposal area.

The only potential water resource project is a storage dam authorized by the 1944 Water Treaty (see II. DESCRIPTION OF THE ENVIRONMENT, TREATY CONSIDERATIONS). This treaty provides that three storage dams shall be constructed in the following reaches on the Rio Grande - Santa Elena Canyon to the Pecos River, Eagle Pass to Laredo, and between Laredo and Roma. The subject treaty further states that, "One or more of the stipulated dams may be omitted, and other than those enumerated may be built, in either case as may be determined by the Commission, subject to the approval of the two governments." Falcon Dam was placed in operation in 1953 and is in the Laredo to Roma reach of the river. Amistad Dam began operation in 1968 and is not located within any treaty mentioned reach of the Rio Grande. Amistad Reservoir lies between the Santa Elena Canyon



THE RIO GRANDE AS AN INTERNATIONAL BOUNDARY

to Pecos River and the Eagle Pass to Laredo reaches (see map on page 12). The Amistad site was selected because of its strategic location below the confluence of the Pecos and Devils Rivers, the sources of the largest recorded floods on the Rio Grande. Although a third major storage dam is possible under the 1944 Water Treaty, such a reservoir is not contemplated by the two governments at this time.

The proposal to preserve part of the Rio Grande for wild and scenic river purposes is not in conflict with the Texas Comprehensive Outdoor Recreation Plan. A 1974 study by the Texas Parks and Wildlife Department, Texas Waterways, suggests that the Federal Government designate a portion of the Rio Grande as a wild river and provide for its administration, operation and maintenance by the National Park Service.

The proposal will not affect the allocation of waters between the United States and Mexico pursuant to international agreements and treaties. The jurisdiction of the State of Texas over waters in the Rio Grande allocated to the United States will be unaffected.

The National Park Service presently administers approximately 65 miles of river frontage in Big Bend National Park. Administration and management of the recommended segment of the Rio Grande as a wild and scenic river is consistent with current National Park Service programs and policies. Additional developments at Rio Grande Village recommended in the current National Park Service master plan are not in conflict with the proposed scenic river designation in that area. The National Park Service proposal to add portions of Mariscal and Boquillas Canyons to the National Wilderness Preservation System will complement the river protection program proposed in this statement. (See II. DESCRIPTION OF THE ENVIRONMENT, RECREATION).

Approximately 22 miles of river frontage within the proposal area is administered by the Texas Parks and Wildlife Department in the Black Gap Wildlife Management Area. Because the Management Area is operated for experimental wildlife management purposes, and the State has no authority to manage area lands for recreation purposes, a potential conflict between wildlife management and recreational use of the river exists. (See III. ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION, IMPACT ON FISH AND WILDLIFE.)

II. DESCRIPTION OF THE ENVIRONMENT

REGIONAL SETTING

The segment of the Rio Grande which is recommended for inclusion in the Wild and Scenic Rivers System flows through three Texas counties, Brewster, Terrell and Val Verde. For purposes of this statement, the 11,836 square mile area contained within the three counties is defined as the region. The Rio Grande, or Rio Bravo del Norte as it is known on the Mexican side of the border, drains the region. There are two major tributaries to the Rio Grande within this area, the Devils and Pecos Rivers; however both of these join the Rio Grande downstream from the recommended segment.

The Mexican Highlands physiographic province and the Edwards Plateau physiographic province are both included in the region. Vegetation is characteristic of the Chihuahuan Desert with a wide variety of cacti, grasses and shrubs.

Climate

The climate is typical of the arid and semi-arid areas of the southwestern United States. Summer temperatures are high, often exceeding 100 degrees, and can be uncomfortable to the river user. Winter daytime temperatures are mild, but drop sharply at night.

The average daily high is 102 degrees in July and 66 degrees in January, and rapid and wide changes in temperature may occur with the passage of cold fronts. Spring and fall temperatures are moderate and ideal for all forms of outdoor activity. Temperatures on the river are from 5 to

10 degrees higher than in the surrounding uplands.

Precipitation is low, generally averaging less than 9 inches per year. Most of the precipitation falls in thundershowers during the summer months, with about 60 percent occurring during the months of June through September. Heavy summer rains pose a definite hazard to river users due to the possibility of rapidly rising water levels and velocities. Relative humidity is low and normally averages 50 percent. The area receives abundant sunshine, averaging 78 percent of the possible.

Population and Economy

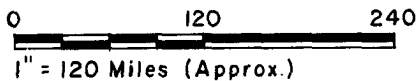
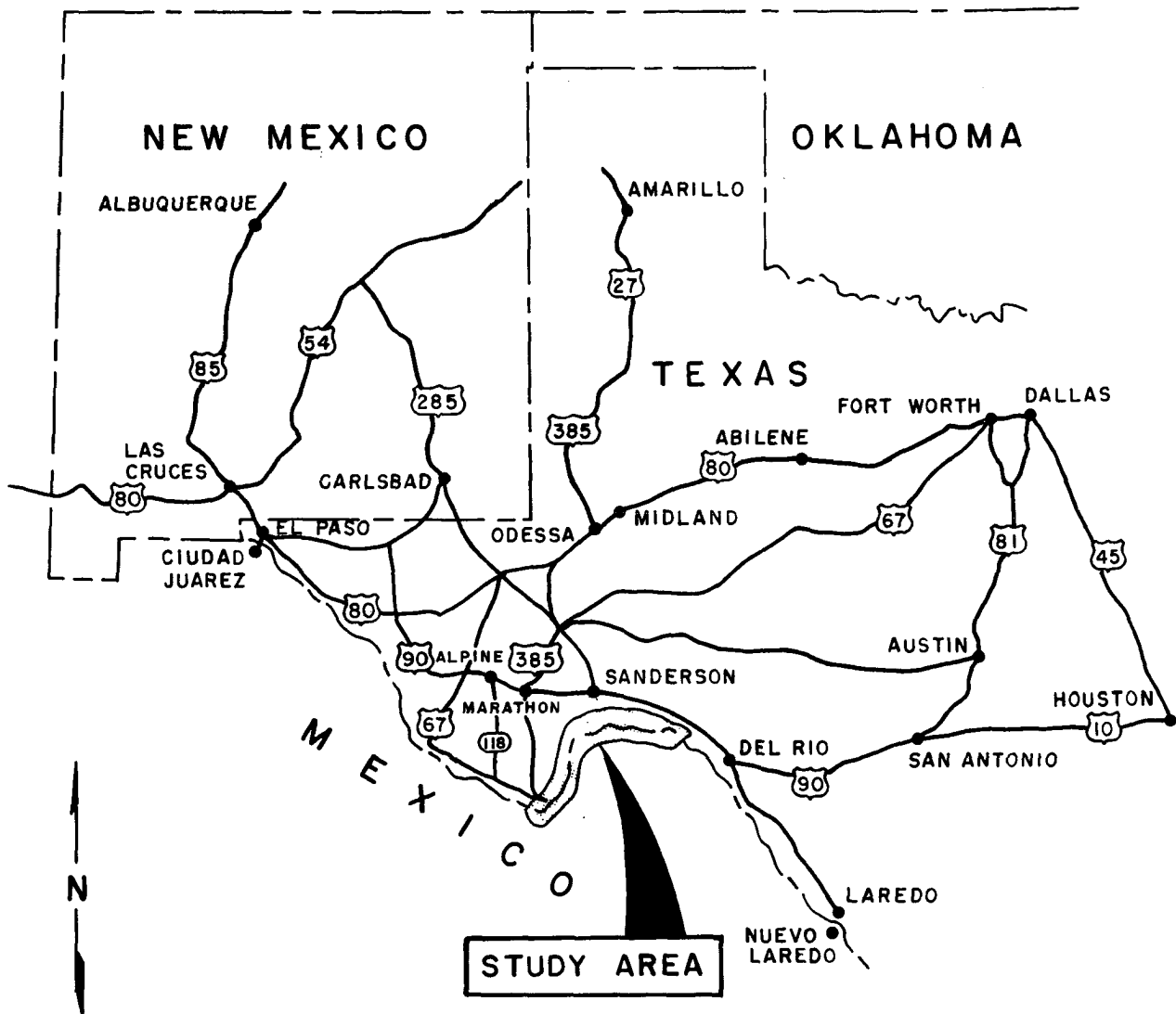
In 1970 nearly 232,000 people lived within 150 miles of the proposal and approximately 1,500,000 were within 250 miles (United States only). As shown in the following table, and the regional transportation network map, the urban river user must travel significant distances to reach the Rio Grande.

Distance and Driving Time From Texas Metropolitan
Areas to the Rio Grande*

<u>Area</u>	<u>Population</u>	<u>Distance (Miles)</u>	<u>Approximate Driving Time (hours)</u>
Odessa	78,000	222	5:00
El Paso	322,000	329	7:00
San Antonio	654,000	406	8:00
Austin	252,000	474	9:00
Dallas	844,000	559	11:00
Houston	1,233,000	603	12:00

* Distance to park headquarters, Big Bend National Park.

The region is comprised of three counties, Brewster, Terrell, and Val Verde. Brewster County is the largest county in Texas containing a land



REGIONAL TRANSPORTATION NETWORK
Rio Grande Wild and Scenic River Study

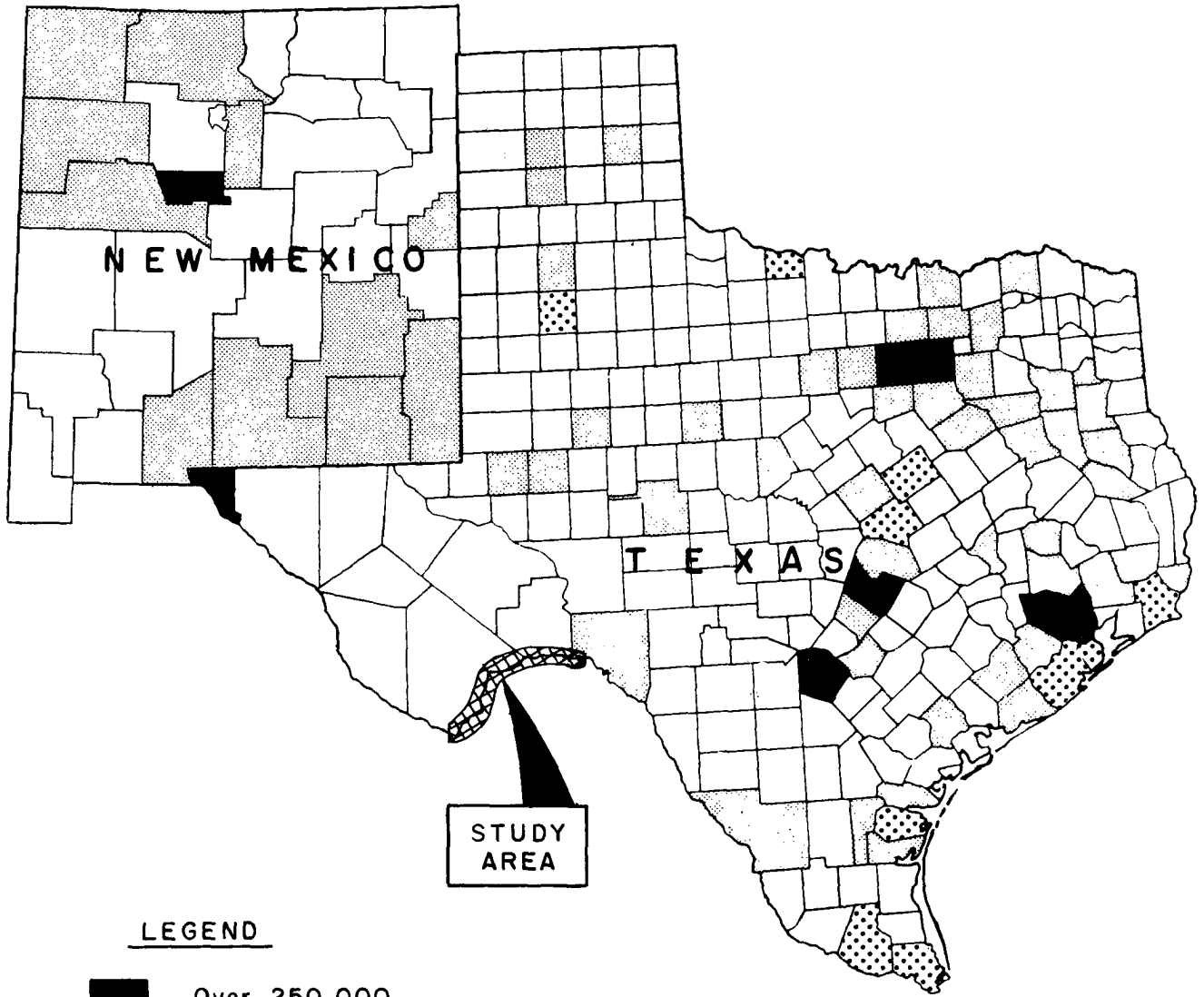
area approximately equal to the States of Connecticut and Rhode Island. Population in 1970 was 7,780, of which nearly 6000 live in the county seat of Alpine. Median family income for Brewster County in 1970 was \$5,643, compared to a median family income of \$3,490 for the State of Texas and \$9,590 for the entire United States. Primary businesses are ranching, (cattle, sheep, and goats), tourism, retirement developments, hunting leases, and Sul Ross State University. Census data for 1970 indicates that 2822 of the total population of 7780 are employed. The maximum of 154 employees in Big Bend National Park represents over 5 percent of the county's total employment.

Terrell County had a 1970 population of 1,940, of which approximately 1200 persons live in Sanderson, the county seat. The county has had a steadily declining population, from a high of over 3000 people in 1950 to the current figure. Median family income was \$6,577 in 1970. The primary business is cattle, hogs, sheep and goat ranching with some gas, oil, sand, and gravel extraction.





Val Verde County has experienced a population increase to nearly 27,500, and can be expected to expand still further due to the drawing power of the recently completed Amistad Reservoir. Median family income was \$6,472 in 1970. The county economy is based on tourism, Federal military installations, and sheep, cattle, goat, and poultry operations. Val Verde County is the leading sheep producing county in the United States.

Transportation

Access to this sparsely-populated region of Texas is limited. The only major east-west highway in the region is U.S. 90, which is located 15-75 miles from the proposal. The major north-south routes include U.S. 385,



LEGEND

-  Over 250,000
-  100,000 - 250,000
-  25,000 - 100,000
-  Below 25,000



**POPULATION DISTRIBUTION
BY COUNTY**

Rio Grande Wild and
Scenic River Study

DATA SOURCE:
U.S. Bureau of the Census

which terminates in Big Bend National Park, and Texas Route 118 which terminates near the northwestern boundary of the National Park at Study Butte. The only other paved roads of significance near the river in the region are Ranch Roads 170, 2810, 169, and 2627. Primary access to and circulation within the region is by private automobile. The nearest major airport at which commercial flights are available is in the Midland-Odessa area, over 200 miles from the proposal. General aviation facilities are found at small airports near Del Rio, Alpine and Marfa. Railroad (Amtrack) and transcontinental bus service is available to Del Rio, Alpine and Marathon.

The Government of Mexico is presently constructing a high standard road between Boquillas, located 22 miles southeast of Big Bend National Park headquarters, and Musquiz, a town 130 miles into the Mexican interior. If an all-weather crossing of the Rio Grande at Boquillas is constructed, this new route will provide access from the Big Bend Region across the Rio Grande to the interior of Mexico.

History

The history of the study area is varied, being affected by Indian, Spanish, Mexican, and American influences.

Long before Europeans were aware of the Rio Grande-Big Bend country it was inhabited by Indian groups practicing agriculture and living in caves and, in subsequent periods, pit houses. Later, the area was the home of various tribes of Eastern Apaches. After the decline of the Spanish "presidio" system in the mid 1800's, the Indians became especially aggressive. Noteworthy in this regard were the Comanches who raided throughout the Big Bend Country and into the northern Mexican states of

Coahuila, Chihuahua, and Durango. The Comanche Trail, the route used on such raids, crosses the proposal area in two places, near the Brewster-Terrell County line and just west of Mariscal Canyon.

The first European to pass near the study area was Alvar Nunez Cabeza de Vaca, a Spanish explorer, who crossed the Big Bend area in the early 1500's. Spanish influence increased throughout the area in subsequent years as a result of increased exploration, and the establishment of missions and "presidios," or forts, along the Rio Grande. One such fort, The Presidio de San Vicente, was built in 1774 approximately 10 miles upstream from Rio Grande Village on the Mexican side of the river. Today all that remains of the Presidio are ruins.

Until the war between Mexico and the United States in 1846 involvement of Americans in the history of the proposed area was minimal. However, several events took place which changed the pattern of authority on the Rio Grande. The Republic of Texas was successfully formed in 1836 and entered the Union in 1845. Disagreement over the western boundary of the new state soon resulted in war with Mexico. In 1848 the Treaty of Guadalupe Hidalgo established the center of the deepest channel of the Rio Grande as the international boundary from El Paso to the Gulf of Mexico.

Grazing history along the Rio Grande dates back to the early Spanish missions established between 1670 and 1690. These Spanish missions had become major centers of livestock concentration by 1700. Historical records indicate that by 1900, some U.S. ranges, and certainly those along the Rio Grande, had already been subjected to 200 years of continuous, heavy grazing. As grasses were depleted the desert lands increased.

A unique facet of the continuing Rio Grande history is woven around the use of the candelilla plant (*Euphorbia antisyphilitica*) for the production of wax. Used first in the early part of the 20th century in sealing wax, electric insulations, and ammunition water-proofing, its importance continues today as an ingredient of polishes and chewing gum. Candelilla wax is obtained by boiling the plant in a solution of water and sulphuric acid. The government of Mexico utilizes a quota system in production and sale while no such controls occur in the United States. Smuggling into the U.S. occurs when the Mexican quota is filled. Vats and other evidences of candelilla operations are found throughout the study area.

An excellent example of an abandoned candelilla operation is the Asa Jones Waterworks, located approximately 10 miles downstream from Reagan Canyon. Asa, a local rancher during the first half of the century, constructed a device to haul water from a spring at the river's edge to the top of the cliff. Two series of pipelines between pumping stations carried the valuable water to a holding tank almost 1,000 feet above the river. Other watering tanks located throughout the ranch were supplied from this one. A candelilla wax camp, complete with vats and other ruins, still lies adjacent to the holding tank at the top of the cliff. Few sites attest to man's ingenuity like this pumping operation.

Another site of historical interest is Burro Bouff, approximately 30 miles downstream from Reagan Canyon, rising more than 1200 feet in a sheer cliff directly above Upper Madison Falls. At the downstream side of the Bluff is an old trail built by cattlemen for access to the Texas side of the river. This trail, the "Schupbach Trail," like Asa Jones Waterworks, attests to the frontier ingenuity evident in the lower canyons.



Asa Jones Waterworks

Contact with the office of the State Historical Preservation Officer indicates that one site within the proposal area is on the National Register of Historic Places. The Hot Springs area, approximately two miles upstream from Rio Grande Village in Big Bend National Park was added to the Register in September 1974, and contains the site of a former health spa and resort and United States Post Office.

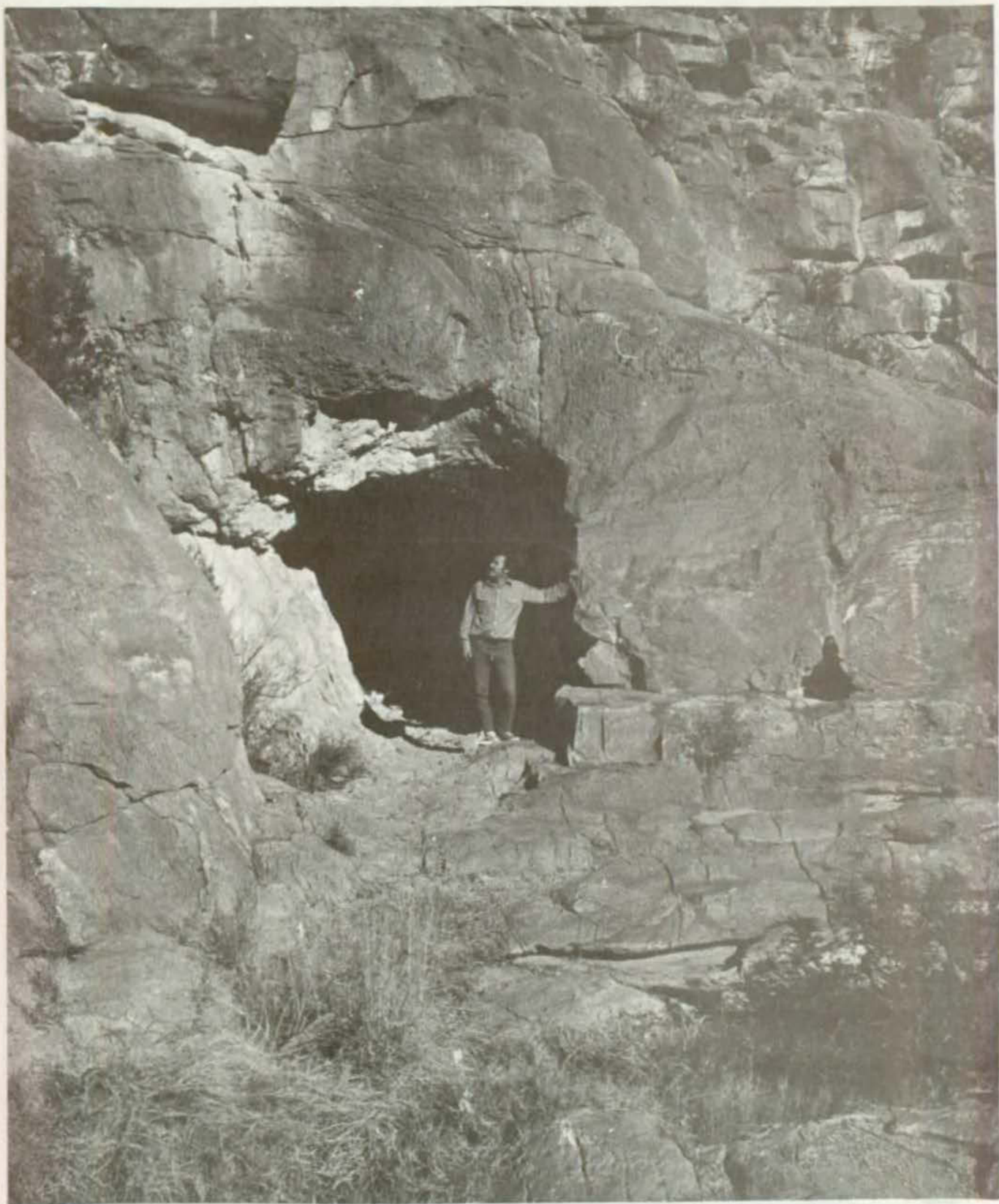
The historical resources of the proposed area, from the Indian and Spanish presence through the boundary survey and the candelilla operations, are significant. These resources plus the existence of Mexico on one side of the river greatly enhance the experience of the river user. Future planning for the riverway will identify and nominate where appropriate significant cultural resources to the National Register of Historic Places in accordance with Executive Order 11593.

Archeology

The canyons and bluffs of the Rio Grande and its tributaries contain numerous archeological sites. Archeological studies at Amistad Reservoir and in Big Bend National Park have established sequences of prehistoric habitation.

Occupation began with Paleo-American big game hunters, possibly as early as 10,000 to 12,000 years ago. Hunting-and-gathering groups of the Archaic stage ranged through the area from about 6,000 B.C. to 500 A.D. The Neo-American stage began sometime after 500 A.D. with the introduction of the bow and arrow and a slight shift in the way of life. Hunting-and-gathering continued as the mode of subsistence for the Neo-American Indians.

At the time of European contact the area was occupied by Coahuiltecan Indians who ranged through the area in small bands. After departure of



The canyons of the Rio Grande contain numerous archeological sites.

the Coahuiltecan Indians, Apache Indians occupied the area. Basically, then, this area was occupied for thousands of years (from 6,000 B.C. to 500 A.D.) by people of the Desert Culture traditions, whose subsistence was based on hunting and gathering wild plant foods.

Rock shelters are common in limestone cliffs along the Rio Grande, and some were used for thousands of years. Cultural deposits in these sites are often several feet thick, and occasionally contain artifacts representing all cultural stages. Because of the dry environment of many of the rock shelters, an abundance of perishable materials are preserved in them. Such items as sandals, cordage, matting, quids, and wooden implements such as fire drills and arrow shafts give a rather complete picture of the material culture of the prehistoric occupants. Mortars and metates found at rock shelters and open sites indicate seed grinding activities, while projectile points commonly found reflect the importance of hunting. Many pictograph sites have been recorded and studied in this portion of the Rio Grande. Open sites are common also and consist of campsites and burned rock or midden sites. The abundance of ring middens or sotol pits illustrates the importance of sotol and lechuguilla as a staple food.

The proposal area contains numerous historical and archeological sites which constitute a non-renewable source of retrievable data concerning man's presence in the river basin over the last 10,000 years. The Texas Historical Commission has recorded more than 100 sites in the area. Some of these sites may be nominated to the National Register of Historic Places as additional investigations are undertaken. Unlike the majority of sites found along other sections of the river which have been subjected

to various destructive forces, many sites in the proposal area are undisturbed, thus enhancing their value as interpretive data sources for archeologists, paleobotanists, geologists, and ultimately the general public.

THE RIO GRANDE AND ITS SETTING

Flow Characteristics

The Rio Grande is located in the south central United States. Rising in the San Juan Mountains of southwestern Colorado, the river flows 1800 miles in a southerly then southeasterly direction to empty into the Gulf of Mexico near Brownsville, Texas. During its journey the river flows through southwest Colorado, central New Mexico and along the Texas-Mexico border.

The average gradient of the river within the proposal area is over 4 feet per mile as the river drops from an elevation of approximately 2,050 feet in the upper reaches of the segment to 1,144 feet at the headwaters of Amistad Reservoir.

The river channel is a series of channel sections, some with pools several feet deeper than the average depth of from 2-4 feet and occasional riffles, rapids and small falls (Upper Madison and Lower Madison Falls). Upper Madison Falls has two sections, each with drops of about six feet, and Lower Madison Falls has a drop of about 10 feet. The channel has a width of generally 170-180 feet, is narrower in some rock canyons and wider in curved sections; or where small islands exist.

Data from two International Boundary and Water Commission gaging stations were used to analyse river flows. These stations are located at Johnson Ranch (13 miles upstream from the Chihuahua-Coahuila state line)

and at Langtry, Texas. The flow at the Johnson Ranch gaging station has an annual average of 925 cubic feet per second (cfs) with an average annual flow of 1,400 cfs at the Langtry gaging station. The most significant factor in the differences in flow between the two stations is spring inflow, averaging 322 cfs for the period 1948 to 1968. Foster Ranch gaging station is located near the Terrell-Val Verde County line; however because it has only been in operation since 1961, long term data were not available.

Optimum flows for floating this river segment, either by raft, canoe, or kayak, range from 200 to 3000 cfs at the Johnson Ranch gage. With discharges smaller than 200 cfs there will be an increasing number of portages, and with lower stream velocities more paddling will be required of rafts. At flows over 300 cfs, caution must be exercised by boaters due to the increased velocity and, consequently, greater danger of damage in rapids. Flows at Johnson Ranch fall in the optimum use range approximately 76 percent of the time. In the downstream one-half of the study segment, flows can be expected to be in the optimum use range approximately 85 percent of the time. It should be noted that National Park Service policy in Big Bend National Park allows no one to float the Rio Grande if the depth is in excess of five feet at Rio Grande Village (approximately 3000 cfs at the Johnson Ranch gage). This policy has been established to insure the safety of the river user.

The percent of time flows are equalled or exceeded for various discharge rates is shown in the following table:

Percent of Time Discharge is Equalled or Exceeded
(Optimum Floatability 200-3000 cfs)

<u>Discharge</u>	<u>Johnson Ranch</u>	<u>Langtry Station</u>
100 cfs	92%	100%
200 cfs	81%	100%
300 cfs	69%	98%
500 cfs	48%	83%
700 cfs	34%	63%
1000 cfs	21%	38%
2000 cfs	9%	13%
3000 cfs	5%	8%
4000 cfs	4%	5%

The following data summarizes historic rates of flow by month at the Johnson Ranch Station. This data indicates those months when high or low flow are most likely to occur.

Historic Flows at Johnson Ranch Station*
(units-cubic feet per second)

<u>Month</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>
January	184	1,923	568
February	139	2,015	598
March	72	1,882	450
April	8	1,242	232
May	0	911	333
June	55	1,741	649
July	96	4,878	1,187
August	200	3,727	1,390
September	157	10,278	2,478
October	80	18,813	1,917
November	144	2,219	754
December	155	1,151	545

*Period 1948-1970

Of special interest is the source of flows in this segment. For the average annual flows reaching the Johnson Ranch station approximately 77 percent is from the Rio Conchos, 4 percent originates in the Rio Grande



The Rio Grande upstream from the Rio Conchos has no flow during some periods.



A five-foot weir at the Foster Ranch gaging station, immediately downstream from the Terrell-Val Verde County line.

upstream from the Rio Conchos, and 19 percent comes from unregulated tributaries. For the average annual flows reaching the Langtry station, the Rio Conchos provides 49 percent, unregulated tributaries below the Rio Conchos provide 25 percent of the flows, spring inflows provide 23 percent, and only 3 percent originates in the Rio Grande upstream from the Rio Conchos.

The Rio Grande upstream from the Rio Conchos has no flow for periods of from several days to several months, resulting from reservoir regulation above El Paso (primarily Elephant Butte and Caballo Reservoirs in New Mexico); water uses in New Mexico and in the El Paso-Juarez Valley; and evapotranspiration losses and minor irrigation uses in the 213-mile reach between the El Paso-Juarez Valley and Rio Conchos. The Rio Grande again becomes a perennial stream in the Presidio-Ojinaga Valley with the inflows from the Rio Conchos. Mexico has constructed three large reservoirs in the 26,404 square mile Rio Conchos drainage basin. Their storage capacities and locations are shown in the following table.

Reservoirs in the Rio Conchos Basin, Mexico

Reservoir Name	Began Operation	River Distance from Study Area Miles	Conservation Capacity Ac.Ft.	Flood Control Capacity Ac.Ft.
Boquilla	1913	363	2,417,500	0
F.I. Madero	1948	307	344,600	0
L. L. Leon	1968	226	280,800	405,300

The only significant diversions from the Rio Grande in the reach between the El Paso-Juarez Valley (Fort Quitman gaging station) and the proposed area are by pumping from the river in the Presidio-Ojinaga Valley for

irrigating about 4,000 acres, and for irrigating about 2,000 acres in the Redford-El Mulato Valley. These small areas do not materially affect flows in the river, and no significant expansion of irrigated areas is probable.

Larger floods generally occur in the period May through October; however, smaller flood discharges have occurred in all months. The major historic floods usually have resulted from extended periods of steady rainfall on the watershed. Smaller Rio Grande flood peaks from large tributary discharges also occur from high intensity, relatively short duration, storms. Historic floods have risen over 24 feet in the canyon at Johnson Ranch and over 45 feet in the canyon at Langtry. As an example of the intensity, the flow recorded at Langtry station in June, 1945 rose in a period of 4 hours from less than 1,000 cfs to approximately 169,000 cfs.

Water Quality

Data on the physical, biological, and chemical water quality characteristics of the study segment are collected by the U.S. Section of the International Boundary and Water Commission and the Texas Water Quality Board. Permanent water quality sampling stations are found at the Foster Ranch upstream from Langtry, two miles upstream from the Johnson Ranch near Santa Elena Canyon, and below the confluence of the Rio Conchos with the Rio Grande.

Texas Water Quality Standards, prepared by the Texas Water Quality Board, were approved by the Environmental Protection Agency in October 1973.

These standards indicate that the Rio Grande between the confluence of the Rio Conchos and the headwaters of Amistad Reservoir is suitable and is used for contact recreation, propagation of fish and wildlife, and domestic raw water supply. The standards specify the following values for the subject river reach: (1) chloride-average not to exceed 150 mg/l, (2) sulfate-average not to exceed 200 mg/l, (3) total dissolved solids-average not to exceed 1200 mg/l, (4) dissolved oxygen-not less than 5 mg/l, (5) pH range-6.5 to 8.5, (6) temperature-maximum of 93 degrees, and (7) fecal coliform/100 ml-logarithmic average not more than 200.

The river reach has very little suspended silt during low flow periods. Conversely, tributary flows following rains result in significant concentrations of suspended silts. Thus, the river water can be expected to be clear during low flow periods and to be very turbid during high flow periods.

The DuPont Corporation obtains fluorspar from mines in Mexico with an ore processing plant located adjacent to the Rio Grande at La Linda, Mexico. Water used in the processing plant operation passes through two detention ponds before discharge into the river. No water quality data are available in the immediate area of this discharge.

Heavy metal analyses have been conducted by the Texas Water Quality Board on Terlingua Creek and the Rio Grande above and below the confluence of Terlingua Creek to evaluate the influence of the abandoned

mercury mine at Terlingua. Results indicate that the mercury levels are higher in this vicinity, probably due to natural erosion of mercury-containing soils in the area. A study completed late in 1973 by Dr. James Houston and Gerald Dumas of Sul Ross State University on mercury levels in the Rough Run-Terlingua Creek area contained the following conclusions: (1) Overall normal pollution level of mercury is less than one microgram of mercury per gram sample, (2) Mercury is primarily associated with the fine particles of the samples (silt), and (3) Mercury level rises significantly during rainy periods due to transportation of mercury-bearing silt by water. The study recommends that: (1) Mercury analysis continue on a quarterly basis to monitor any change in normal pollution level of mercury, (2) Soil and silt samples be separated by sieving and mercury content of each fraction be determined, (3) Samples be analyzed for organic mercury content, (4) A study be made of small animals and fish in the area to determine the mercury level in their systems.

Upstream from the proposed area three communities have the potential to affect water quality. Presidio (population 1,050) and Redford (population 107) do not have sewage collection and treatment systems. Ojinaga, Chihuahua (population 12,757) has a sewer system serving most of the city which discharges to a 2-cell, 5 acre lagoon. Effluent from the lagoon is used for irrigation of adjacent fields and very little water reaches the river. These communities lie nearly 100 miles upstream from the proposal. The Cities of Marfa and Alpine are approximately 60 and 70 miles respectively from the Rio Grande and provide adequate treatment for their wastewater.

Water Rights

Texas law declares that water in all water courses is public water subject to public control. The Texas Water Rights Commission is statutorily responsible for water throughout the Rio Grande basin. Also the Texas Water Rights Commission administers a permit system which allows various entities in the State of Texas to obtain permission to divert and use unappropriated water allocated to the United States when it is available from a stream. In many cases private riparian landowners have established their right to use portions of the public waters by historical or long-term use. Over the years this has resulted in often ambiguous water rights.

By order entered February 22, 1971, the Texas Water Rights Commission found that an adjudication of all claims of rights to water allocated to the United States would be in the public interest. An investigation and report was ordered on water uses from that segment of the Rio Grande and its contributing Texas tributaries, except the Pecos and Devils Rivers, between Amistad Dam upstream to the diversion at the Dave Gill Dam in Hudspeth County, Texas. Adjudication was also ordered for claims in the Upper Rio Grande and contributing Texas tributaries.

Diversion of water within the river reach is minimal. The Texas Water Rights Commission has identified one permit and two water right claims in the river segment as follows: (1) A municipal permit to 790-acre feet per year of Rio Grande water to be diverted at Rio Grande Village, owned by the National Park Service. (2) An assertion of a right to irrigate 481 acres at Stillwell Draw in Brewster County. The extent of this water right must await the outcome of adjudication proceedings, (3) An assertion of a right to irrigate 56 acres located about 20 miles west

of Langtry, Texas. Again, this right is being contested by the State of Texas and must await the results of adjudication.

Because the proposed river reach is a legally navigable stream the State of Texas owns the bed of the Rio Grande to the center of the channel, except where transferred to the Federal Government. The state, therefore, is the proper entity to issue mineral or gravel permits involving the bed and bottom of the Rio Grande. Such permits are contingent upon the mineral extraction not causing a change in the international boundary.

Treaty Considerations and Water Resource Development

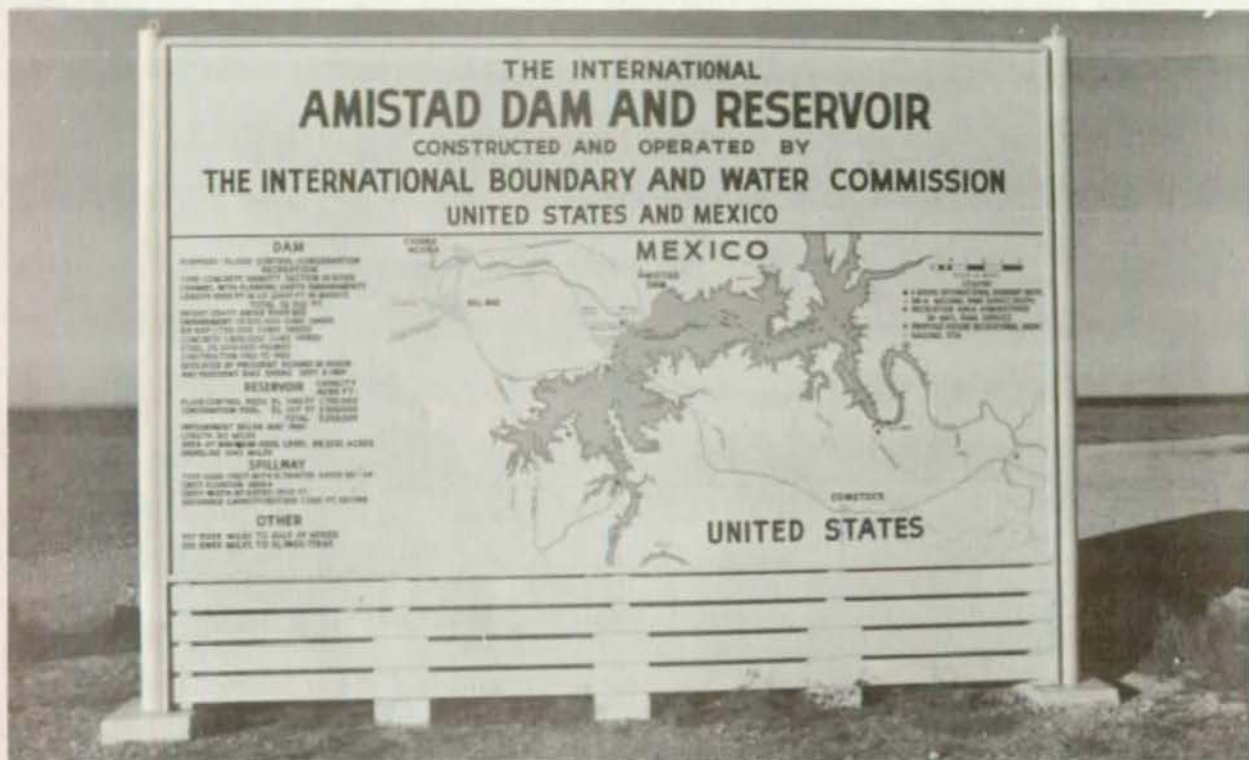
Because the Rio Grande forms the boundary between the United States and Mexico, numerous international treaties and agreements affect the river and the use of its waters. (See map on page 12). The most important agreements of this nature are discussed below.

The Treaty of Guadalupe Hidalgo (1848) established the Rio Grande from the Gulf of Mexico to the southern boundary of New Mexico as the international border. It also stipulates that navigation of the river shall be free and common to both countries.

The 1944 Water Treaty outlines the rights of the two countries with respect to the waters flowing into the Rio Grande. The United States was allotted all of the water entering the river from its principal tributaries. It was also allotted one-third of the flow from six principal Mexican tributaries above Falcon Dam, including the Rio Conchos. However, this allotment must not be less than an average of 350,000 acre-feet annually in cycles of 5 years. The remainder of all other flows is divided equally between the two countries. Because the

Rio Conchos is only one of the six named Mexican tributaries, and the primary source of water for the study segment, Mexico has the option of determining from which tributary water is released to comply with the 350,000 acre-foot treaty requirement. Therefore, the Mexican Government can, theoretically, control completely the flow reaching the Rio Grande from the Rio Conchos, thereby allowing no flow at times. Such an event is considered highly unlikely.

The 1944 Water Treaty also provides for the joint construction of works on the main channel of the Rio Grande. A discussion of major storage dams is included in Chapter I, Interrelationship with Other Projects and Jurisdictions. The 1944 Water Treaty includes a provision that the International Boundary and Water Commission study, investigate, and prepare plans for flood control works between Fort Quitman and the Gulf of Mexico and that each government agrees to construct such works as may be recommended by the Commission and approved by the two governments. These works may include levees along the river, floodways and grade control structures, and works for the canalization, rectification, and artificial channeling of reaches of the river. At the present time, no such works are being considered for the proposal area. The 1944 Water Treaty further states that either government may divert and use its allotted water and may construct the necessary works for such diversion between Fort Quitman, Texas and the Gulf of Mexico. Thus, although no large diversions are presently known or contemplated, both Mexico and the United States have the privilege of making such diversions in the future. The treaty does not alter or control the distribution of water to users within the individual states.



Amistad Dam and Reservoir was authorized by the 1944 Treaty



Amistad, a term meaning friendship in Spanish, signifies the cooperative nature of the project.

The other major treaty affecting the proposal area is the Boundary Treaty of 1970. This treaty defines the international boundary as:

"...along the middle of the channel occupied by normal flow and, where either of the rivers has two or more channels, along the middle of the channel which in normal flows has the greater or greatest average width over its length, and from that time forward, this international boundary shall determine the sovereignty over the lands on one side or the other of it, regardless of the previous sovereignty over these lands."

The 1970 Boundary Treaty also provides that works can be constructed by either country to prevent a large tract of land from being detached. However, because of the small areas of land in the canyons of the proposed segment, and due to the rock canyon walls precluding substantial lateral boundary movement, it is unlikely that boundary preservation or restoration works will be constructed in the canyons.

Access to the River

Because of the rugged nature of the proposal area, public access is extremely limited. No major roads or railroads parallel the river and only one bridge, a private structure at La Linda, Coahuila, crosses the river segment recommended for inclusion in the National System. Two paved roads reach the river, one at Rio Grande Village in Big Bend National Park and the other, Ranch Road 2627 to La Linda, Coahuila. A private 2500 foot paved airstrip is located approximately 2 miles southwest of the La Linda crossing. This facility is open to public use only in emergencies and lies outside of the resource management area.



*A primitive road leads to the river in the
Black Gap Wildlife Management Area.*



*A few unpaved private ranch roads
lead to the rivers edge.*

Access is provided to the river on unimproved roads, often passable only by four-wheel drive vehicle, at several points in Big Bend National Park. These roads are seldom patrolled, are often closed during stormy weather, and a park permit must be obtained for overnight use along the roads. The unimproved River Road, passing through the southern end of the Park from near Rio Grande Village to Castolon, provides access to seven fishing camps along the recommended segment of the Rio Grande. (See map on page 68)

An unimproved road provides access to the river in the Black Gap Wildlife Management Area. This road serves 25 fishing camps provided by the Texas Parks and Wildlife Department. This route is appropriate only for high-clearance or four-wheel drive vehicles.

A few unpaved private ranch roads lead to the river's edge; however, river access at these points is controlled by the landowner. In some cases a fee is charged to use these roads for access purposes.

Geology

The geology of the river area is complex and varied, contributing in large measure to the scenic and recreational values of the stream and its surroundings. The upper 140 miles of the study area lie within the Mexican Highlands physiographic province which consists mainly of Cretaceous age rock. This rock has been folded and faulted to form a series of northwestward trending "step blocks" and anticlines through and around which the Rio Grande has cut its channel to form a series of spectacular canyons with walls up to 1,850 feet in height. About 70 percent of the river length is confined within canyon walls with

virtually no flood plain and thus affords the river traveler many interesting and varied views of the geological periods through which he is passing.

The two predominant Cretaceous Formations are the massively bedded Georgetown and Edwards limestone formations which form towering cliffs. The Maxon, Walnut, Comanche Peak, and Kiamichi Formations are also exposed; however, these formations are relatively thin and form slopes, between and below the cliff-forming Georgetown and Edwards Formations. These rocks, so well exposed by the incision of the river, are entirely sedimentary in origin. The massive and predominant limestones were originally deposited as flat lying calcareous mud on the bottom of the sea which covered the entire region about 100 million years ago. Subsequent uplifting, folding, faulting, and erosion have produced the present day topography. In addition to the main Rio Grande canyon, tributaries to the river on both the Mexican and U.S. sides have cut canyons down to the river level and contain many interesting and unique geological features such as "pouroffs" (near vertical rock waterfalls), potholes etched in the rock floors, buttresses, overhangs, caves, solution cavities, and "honeycombed" rock.

Erosion by water has sculptured the exposed rock surfaces, and combined with other climatic agents, has produced rock talus slopes at the base of the limestone cliffs which support desert type vegetation. Jointing in the massive limestones has allowed limestone blocks up to 1,000 feet in height to fall into the river bed creating boulder strewn rapids. Other rapids are formed by boulder outwash from side canyons.

Many small springs flow directly into the river from both sides. Most are hot springs with water temperatures from 17 to 35 degrees F. above normal groundwater temperatures. These springs appear to be associated with faults and evidently are discharging water that has risen from depths of 1,000 to 1,500 feet.

At the upstream end of the proposed river area the river is deeply incised in narrow and precipitous Marsical Canyon (see area map on page iv), composed mainly of Georgetown limestone which has been folded upward into a large anticlinal fold. Notable within the canyon are polished white boulders. San Vicente and Hot Springs Canyons are short and incised through the Boquillas Formation. A short distance downstream from the Mexican town of Boquillas, the Rio Grande has cut through the extensively faulted Del Carmen Mountains forming Boquillas Canyon which is approximately 12 miles long. The canyon walls are near-vertical and the adjacent topography attains high elevations through folding and step-faulting. The Edwards, Kiamichi, and Georgetown Formations are exposed in the canyon walls.

Downstream from Boquillas Canyon the river flows across a relatively broad and open flood plain or "vega" consisting of alluvium resting on rocks of the Glen Rose Formation (see photo on page 44). Near the confluence with Reagan Canyon the flood plain narrows abruptly and the river remains in a continuous deeply incised canyon for almost 40 miles. This canyon is a continuous section of essentially flat lying Georgetown and Edwards limestone. The river and its tributaries are incised 500-1,500 feet below a plateau-like surface which is interrupted



Downstream from Boquillas Canyon the river flows through a broad flood plain or "vega".



Nearly 70 percent of the study segment is confined within canyon walls

by several anticlinal and monoclinal folds. The portion of the river within the Mexican Highlands province ends below San Francisco Canyon.

The river segment from San Francisco Canyon to the end of the proposal area lies in the westernmost portion of the Edwards Plateau physiographic province; an area of relatively undisturbed level-lying sediments. The river remains within a canyon section with the walls formed of the massive Georgetown limestone, but is flowing across the uppermost portion of the Georgetown. Therefore, the walls are much lower and are capped with the younger and less resistant Del Rio and Buda Formations. At several places along the river the Georgetown Formation projects out into the river in a series of incised cliffs which have vertical faces approximately 50 feet in height.

Mining

Very little data is available on the mining and mineral resources of the proposed area. An onsite mineral resource study of the area has not been made and its mineral potential has not been fully evaluated.

One active mining operation exists along the river. The DuPont Corporation obtains fluorspar from mines in Mexico with an ore processing plant located adjacent to the Rio Grande at La Linda, Coahuila. A small housing area for employees of the DuPont Corporation is located in the United States across from La Linda. Fluorspar deposits have been mined in numerous areas in Mexico from San Vicente Mountain east to the Sierra del Carmen Range. No fluorspar deposits have been identified near or adjacent to the Rio Grande in the United States. Because of the occurrence of fluorspar in adjacent areas in Mexico the potential exists that such



Fluorspar is mined and processed adjacent to the river at La Linda, Mexico and transported by truck across the Rio Grande for use in the United States.

deposits may be discovered along the river corridor recommended for inclusion in the National System.

According to Maxwell (1968) quicksilver or mercury production played a significant role in the development of the Big Bend Region. Mining of the quicksilver ore, mostly cinnabar, began in 1896 primarily at the Chisos mine in Terlingua, approximately 30 miles northwest of the proposal area. Until sustained mercury production ceased in 1946 the Terlingua mining district yielded about one-fourth of the total mercury production in the United States and production has been renewed intermittently in recent years, depending on the economics of the mercury market. Some mercury production, primarily in the 1920's, came from the Mariscal mine located approximately eight miles north of Mariscal Canyon. This mine has long been abandoned. Presently there are no active mercury mining operations in or adjacent to the proposed area; however it is possible that future discoveries may be made.

Beds of coal are found in the Terlingua Creek area approximately 20 to 35 miles northwest of the proposed area. Sub-bituminous-grade coal was mined 12 miles northeast of Terlingua and converted into producers gas for use as fuel in the mercury operation at Terlingua. No coal deposits have been identified within the confines of the proposal.

The U.S. Geological Survey has indicated the presence of petroleum in Big Bend National Park; however, Maxwell states the following when discussing quicksilver ores:

"Some ores in the area (the Boquillas Formation, principally

in the eastern and southeastern part of the park) contain small amounts of petroleum and there has been some small seepage of solid bituminous material from the adjacent rocks. Udden (1918) compared the occurrence of some quicksilver ores which are present at the crests of anticlines in porous limestones below impervious clay, with the accumulation of petroleum, which also commonly occurs in porous strata on anticlines."

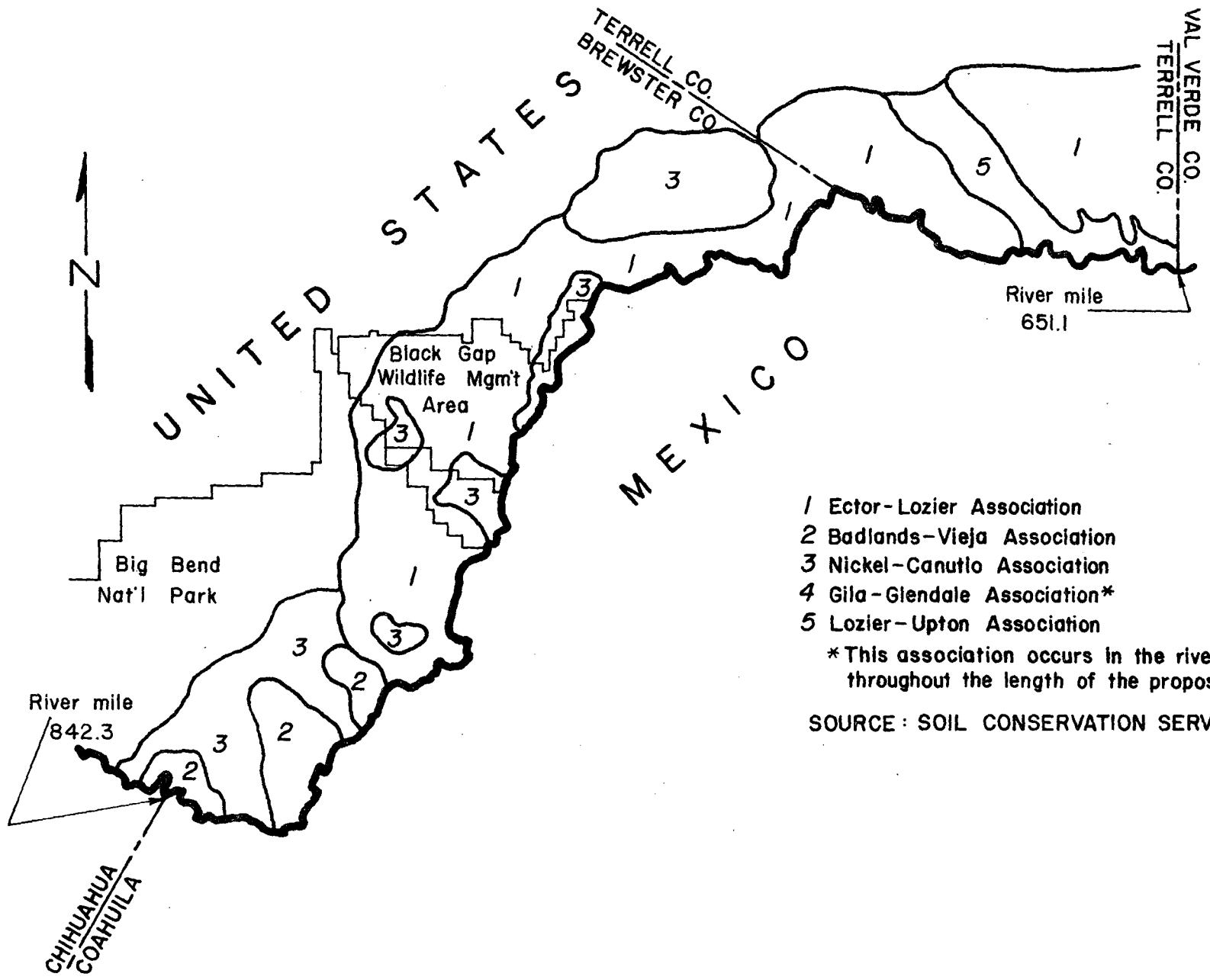
No exploitable occurrence of gas or oil has been reported within the river corridor.

No sand and gravel extraction operations presently exist in the riverbed of the Rio Grande. Because of the international nature of the stream, the treaty restrictions on channel modification, and the long distance from a significant market area, it is unlikely that sand and gravel extraction will occur in the proposal area.

Soils

The principal soils occurring in the river bottom belong to the Gila-Glendale Association. These soils are deep, calcareous, loams, clay loams, and fine sandy loams developed on recent alluvium. These soils are subject to flooding and runoff is rapid. Included in this association are small areas of gravelly and sandy stream washed materials occurring as sand and/or gravel bars. This association extends the entire length of the proposal.

Portions of the upland soils along the proposal area within Big Bend National Park (See General Soils Map on page 49) belong to the



- 1 Ector-Lozier Association
 - 2 Badlands-Vieja Association
 - 3 Nickel-Canutlo Association
 - 4 Gila-Glendale Association*
 - 5 Lozier-Upton Association
- * This association occurs in the river bottoms throughout the length of the proposal.

SOURCE: SOIL CONSERVATION SERVICE

GENERAL SOILS MAP

Badlands-Vieja Association, and consist of nearly barren dissected clay basins with hardly any soil development and very active geologic erosion. The use of this association for camping and related recreational activities is limited by the large and small stones and loose, clayey surface. Other uplands along the proposal area are in the Nickel-Conutio Association. The Nickel-Conutio Association consists of light colored, gravelly, calcareous soils on the undulating and rolling hills.

The Ector-Lozier Association occurs along the proposal area primarily from the Black Gap Wildlife Management Area downstream. This association consists of dark and light colored, shallow, stoney soils on undulating to steep hills that occur within the canyon sections of the river environment. Included in the association are limestone rock outcrops, as well as the talus covered slopes at the base of the rock outcrops. The soils of this association are subject to erosion when overgrazed or disturbed, and are slow to recover. Disturbance such as road construction, paths and trails, strip mining, etc. in this association can contribute to severe gully erosion.

Near the downstream end of the proposal area (the Terrell-Val Verde County line) the Lozier-Upton Association occurs. This association is characterized by rolling to steep flagstone hills. Heavy continuous grazing results in almost barren soils and recovery is slow.

Vegetation

The proposal area lies in the Chihuahuan Desert, one of the largest and most diverse deserts in North America.

Within the confines of the canyons are a number of distinct, yet integrated plant communities which constitute an area rich in species composition and uncharacteristic of the desert.

Growing along the river in a relatively continuous band and often forming an impenetrable green barrier are giant reed, common reed, seepwillow, southwestern blackwillow, buttonbush and sandgrape. In the lower one-third of the canyon elevation velvet ash, thicket creeper and poison ivy form a second wall of greenery. Between this wall and the talus slopes is a zone marked by Bermuda grass frequently interlaced with reeds, grassburrs, huisache, seepwillow, mesquite, tornillo, saltcedar, tree tobacco and lotebush.

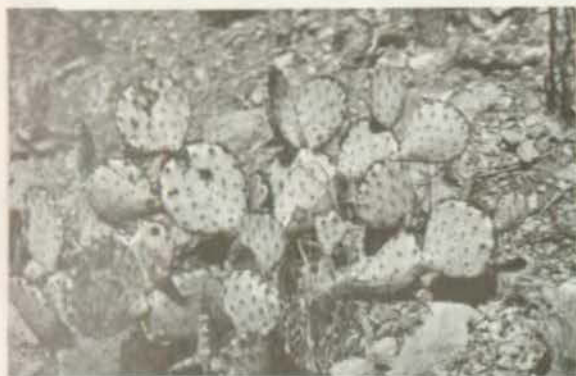
Progressing away from the river the vegetation of the talus slopes is the first which is truly characteristic of the desert. Among the more common plants are: lechuguilla, hechtia, sangre de drago, guayacan, blackbrush and catclaw acacia, lippia, Torrey croton, spiny hackberry, Gregg buckthorn, cloak ferns, Indian mallow, agarita, desert rue, myrtle croton, chino grama, lantana, lotebush, ephedra, ocotillo, cenizo, guayule, desert yaupon, candelilla, feather dalea, persimmon, creosotebush, javelina bush, resurrection moss, little-leaf sumac, wolfberry, ruellia, slim-leaf goldeneye, and sida and various cacti. Perhaps the most surprising aspect of the talus slope community is the remarkable variety of cacti to be found growing among the rocks. Several of the most common species are: tasajillo, blind pear, cob cactus, dog cactus, long-spined prickley pear, brown-spined prickley pear, button cactus, strawberry and devils-head cacti, spinemound cactus, pitaya, and fishhook cactus.



The river is bordered for much of its length by a dense barrier of "river cane."

The study segment displays a wide diversity of plant life including:

spiny-fruit prickly pear



rainbow cactus



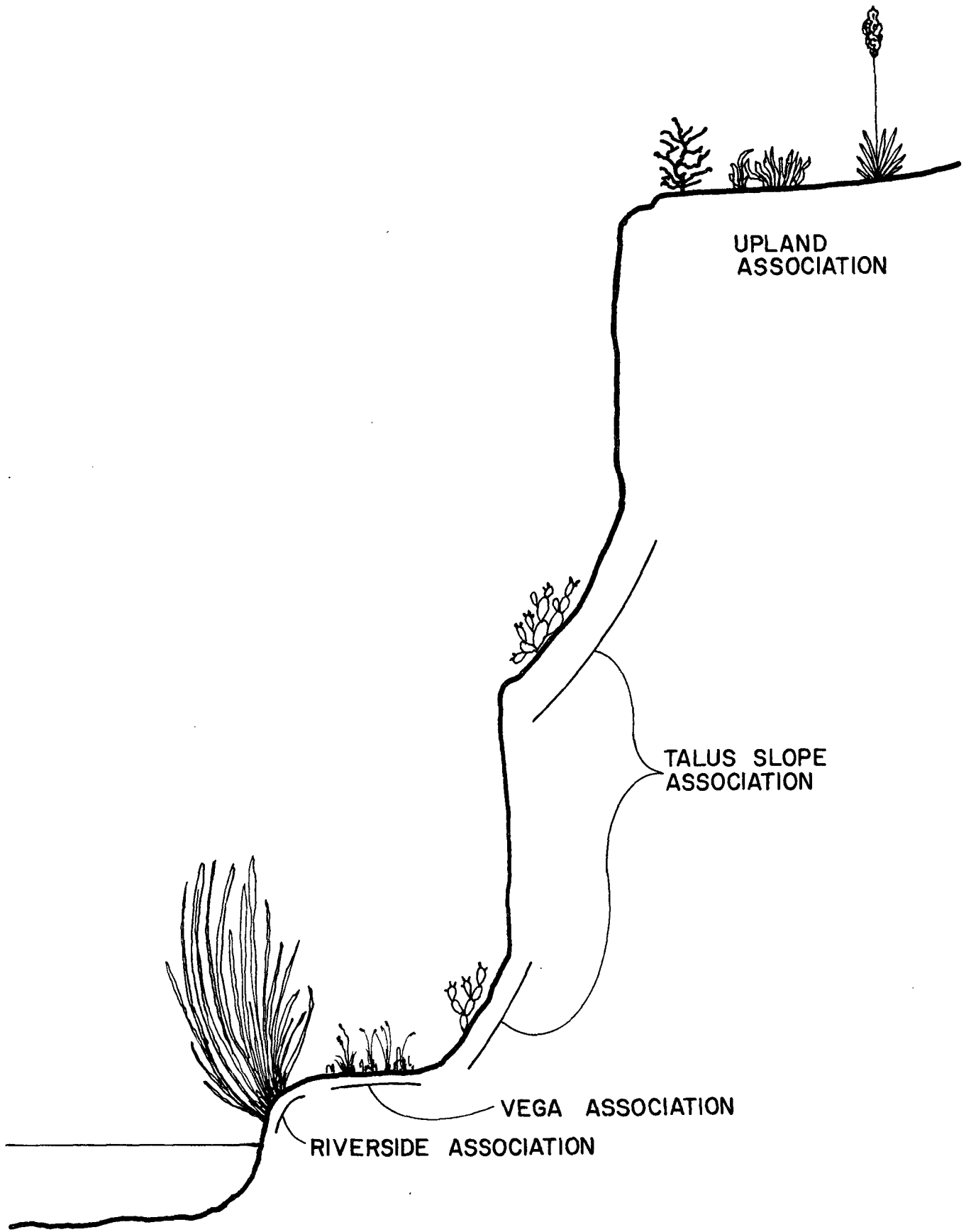
lechuguilla



Cracks in the sheer walls of the narrow side canyons shelter a distinctive and in some cases unique plant community whose main components are: coyotillo, rock nettle, evergreen sumac, blackbrush acacia, trompillo, candelilla, Mexican buckeye, spiny hackberry, poison ivy and baccharis-leaf penstemon. Two rather special members of this community are cliff thistle and cliff bedstraw. Both are rare and endemic to limestone cliffs in the Trans-Pecos Region.

Narrower, more protected side canyons support a tremendous diversity of species. A sample of the more common species readily demonstrates this diversity: persimmon, Mexican buckeye, coyotillo, mountain laurel, sotol, Torrey yucca, soaptree yucca, Gregg ash, blackbrush acacia, Torrey croton, little leaf leadtree, slim-leaf goldeneye, evergreen sumac, trompillo, Texas kidneywood, beebush, spiny hackberry, guayacan, wolfberry, redbud, catclaw acacia, cenizo, agarita, butterflybush, silktassel, lippia, lantana and menodora. Various cacti, ferns, grasses and annual wildflowers are also present.

Unfortunately, the uplands have borne the brunt of man's impact. Perhaps the best example of what the upland should look like can be found at the summit of Burro Bluff (See Topographic Map). Here chino grama and side-oats grama are common; tanglehead prospers in wetter areas. Present also are hairy and red grama. Although grasses predominate, cacti and lechuguilla are still in evidence as are many of the typically desert shrubs and subshrubs such as allthorn, feather dalea, blackbrush acacia, creosotebush, yucca and ocotillo.



VEGETATION PROFILE

By contrast, the vast majority of the upland has been nearly depleted of all grasses save such hardy species as slim tridens, fluffgrass, false-grama, and three-awns. The once desert grasslands are now of little or no economic value. The grasses have been replaced by tenacious brushy species such as ocotillo, yucca, and creosotebush. Much of the ground-cover is composed of lechuguilla.

The ephemeral, short-lived, desert plants are frequently the most arresting feature of the desert. In the spring the riverbank is lined with the large but delicate flowers of the evening primrose. Talus slopes may be accented with the brilliant red of the Indian paintbrush, or with the delicate yellow or white of stickleaf mentzelia. Climbing snapdragon, Mexican navelseed or silky evolvulus accent most of the slopes. Many stark, dry flood plains can be startling sights when covered with thousands of flowering globemallows, twistflowers, doze-daisies, desert bailey, or macheranth.

Several plants in the area deserve special recognition because they are unique and/or rare. All are recommended for further study as possible candidates for the Endangered or Threatened Species Lists in the Smithsonian Institution's "Report on Endangered and Threatened Plant Species of the United States" (1975), prepared as directed by Section 12 of the Endangered Species Act of 1973. Five named species are likely candidates for the list:

(1) Shiner's brickellia (Brickellia shineri) is a rare species of Brewster and Val Verde counties, Texas, and Chihuahua, Coahuila, and Nuevo Leon, Mexico. It is a transitional species linking the genera Brickellia and Eupatorium and, therefore, of definite botanical significance.

(2) Cliff Thistle (Cirsium turneri) is a rare endemic of Brewster (and perhaps Terrell) County, Texas, known from bluffs at 3,100 feet in the Maravillas Canyon.

(3) Boke's button cactus (Epithelantha bokei) is a commercially exploited species known from Brewster County and adjacent Mexico. The type locale is hills near Boquillas Canyon at 2,700 feet in Big Bend National Park. It has also been found near Lajitas, west of the study area.

(4) The cliff bedstraw (Galium correllii) is a rare species of which the type locale is Eagle Nest (Langtry) Canyon, east edge of Langtry, Val Verde County, Texas. Thus, it may be within the study area. It is also rare in northern Coahuila, Mexico.

(5) Polygala maravillasensis, the Maravillas milkwort, is a rare species of which the type locale is a mountain summit west of Maravillas Creek, about two miles from the mouth of Maravillas Canyon, Brewster County, Texas. A few plants are known from Coahuila, Mexico. An expert on this section of the genus Polygala knows of only three or four populations in existence.

Emorya suaveolens will require further study to determine if it qualifies as Endangered or Threatened. It is of a monotypic genus in Maravillas Canyon near the Rio Grande, Brewster County. It is known also from Coahuila and Nuevo Leon, Mexico, where it is less rare.

Fish and Wildlife

The Rio Grande provides the water requirements for many forms of wildlife in a region where the occurrence of water is an exception rather than the rule. The river provides a natural corridor through rough, arid terrain and is a valuable resting area for many migratory bird species, as well as a permanent home for numerous wildlife species. In contrast to the arid, brush-covered slopes and cliffs, vegetation along the river is usually lush and often forms a dense thicket; however, this habitat is frequently limited to several yards in width. Javelina, quail,

mourning dove and white-winged dove are frequently observed. Only a few mule deer utilize the land adjacent to the river, probably due to illegal hunting (outside Big Bend National Park).

Signs of raccoon, bobcat, coyote, ringtail, gray fox, and striped skunk are commonly observed. The mountain lion (Felis concolor stanleyana) and Mexican wolf (Canis lupus baileyi) are rare in this area primarily because much of the land adjacent to the river is sheep country and man's utilization of this region is contradictory to the welfare of these predators. In spite of this conflict, the area is one of the few places the mountain lion may be found in Texas and the wolf may occur in southwestern United States. The welfare of both species should be considered in all planning activities for the river. The Mexican wolf is now a candidate for the Endangered species list. Although the wolf is not definitely known to occur in the study area at the present time, it has been found in northern Brewster County in recent years.

Beaver are abundant in the upper portion of the proposal area near the Rio Grande Village and outside of the rock-walled canyon areas within Big Bend National Park. They decrease to an uncommon status about midway in the recommended reach. This pattern is seemingly proportional to the density of willow, their major forage species and to the increased influence of man on the lower portions of the river segment under study. Small mammals are common in the hills and talus slopes adjacent to the river. Several species of bats, primarily the western pipistrelle, are numerous along the river and their feeding habits can be observed each evening and morning.

The river corridor is heavily used by birds, especially as a stopover during migration. Numerous colonies of cliff swallows use the area and owls, hawks, falcons, and vultures are common residents. The calls of the canyon wren and black phoebe accompany the river user. Even though the river runs through excellent golden eagle habitat, there are few golden eagles for the same reason that there are few mountain lions. Osprey and sharp-shinned hawks utilize the river during migration. Red-tailed and sparrow hawks are abundant as the cliffs support eyries that are completely protected from predation. Prairie falcons are occasionally seen soaring along the cliffs. A few of the last remaining American peregrine falcons (Falco peregrinus anatum) breeding in Texas frequent the cliffs along this section of the river. The American peregrine falcon is listed as endangered by the Secretary of the Interior in accordance with the Endangered Species Act of 1973. Any active aeries along the river will almost surely qualify as critical habitat under section 7 of the Act. This endangered species feeds almost exclusively upon the abundant bird life.

The endemic Big Bend mosquitofish (Gambusia gaigei) is found in an isolated pond adjacent to the flood plain near Rio Grande Village in Big Bend National Park. This fish is officially listed as Endangered.

Two fishes are definite candidates for the Endangered or Threatened list. The Chihuahua shiner (Notropis chihuahua) is known in the United States only in the Park, and occurs in the lower reaches of Tornillo and Terlingua creeks. The bluntnose shiner (Notropis simus) may be extinct. If it still occurs, it will be found in the Rio Grande itself.

Three possible candidates for the Threatened list are found in the study area. The Mexican stoneroller (Campostoma ornatum) is a fish found in Alamito Creek, Presidio County, Texas, and in Terlingua and Tornillo Creeks within the park. The Concho River pupfish (Cyprinodon eximius) is known from Terlingua Creek above the study area but may occur in clear-flowing streams within the study area. Lastly, the Big Bend turtle (Pseudemys scripta gageae) is found from Big Bend National Park eastward approximately to Laredo and south of the Rio Grande in several waterways of Mexico.

Poisonous snakes found in the river area are the black-tailed western diamondback and rock rattlesnakes and the Trans-Pecos copperhead. Other snakes include the bull snake, Big Bend patch nose snake, spotted night snake, Texas glossy snake, Texas long nose snake and Trans-Pecos rat snake. The soft-shelled turtle and leopard frog are common in the aquatic habitat of the proposal area.

There is an abundance of game fish, including bass and channel catfish. Also, river carpsuckers, carp, bullhead catfish, alligator and long-nosed gar are plentiful. Presently, this section of the river receives little fishing pressure, and only several hundred people fish the U.S. side annually. Channel catfish fishing is excellent in some stretches of the river, especially in the area of pools when turbidity levels are low.

The major problem adversely affecting wildlife within the proposal area outside of Big Bend National Park is over-grazing on both the American and Mexican sides of the river. Additional over-grazing of the land adjacent to the river can be anticipated and will further reduce the habitats of the indigenous wildlife. Watershed deterioration, increased siltation, soil loss, run-off into the Rio Grande, and the destruction of wildlife habitat are unavoidable consequences unless appropriate range conservation measures are undertaken.

Land Ownership

The following table shows the current landownership occurring in the Rio Grande river area, based on a corridor one mile wide on the Texas side.

<u>Ownership</u>	<u>Acres</u>	<u>Percent</u>
State of Texas	18,400	17%
Federal Government	25,185	23%
Private	63,735	59%
Unknown	<u>1,050</u>	<u>1%</u>
Totals	108,370	100%

The land owned by the State of Texas is controlled by two governmental agencies. The Texas Parks and Wildlife Department's Black Gap Wildlife Management Area has over four-fifths of the State administered land (approximately 15,155 acres) under its jurisdiction. This area is utilized for wildlife research purposes. A narrow band of river frontage through the Management Area has been developed to include fishing shelters which are open to the public. The remaining State lands within the corridor (approximately 3,245 acres) are administered by the Texas General Land Office. These are leftover lands that were either never sold or that have reverted back to the State for various reasons. These tracts of land range from 100 to 600 acres in size and are scattered along the river in Brewster and Terrell Counties. About 50 percent of the tracts (approximately 1,622 acres) are leased by adjacent landowners for grazing purposes. The remaining 50 percent is either inaccessible or not suitable for grazing purposes, which has been the only feasible use for this land. Currently very little management or control over these lands is being exercised by Texas and they are often difficult to locate or inspect.



*Major public landholdings include
Big Bend National Park and,*



the Black Gap Wildlife Management Area.

Federal lands along the river are primarily under the control of the National Park Service at Big Bend National Park. The other Federally owned land is a 270 acre lineal strip along the river upstream from the Langtry. This land is administered by the National Park Service through agreements with the International Boundary and Water Commission in conjunction with Amistad Reservoir and is principally contained within steep canyon walls. Approximately 710 acres of streambed are in Federal ownership and nearly 1600 are in State ownership.

Presently, 41 private landowners are found along the river segment in the United States. Over 50 percent are absentee owners and the number of absentee owners has increased significantly since 1960. A trend toward fragmentation of large land holdings is evident. Such fragmentation is shown in the change from 25 landowners in 1960 to the current 41 landowners in 1973, an increase of 64 percent. It should be noted that four large land transactions took place between 1970 and 1973.

Land Use

The major land use categories shown in the following table are based on a corridor one mile wide on the United States side of the Rio Grande from River Mile 842.3 to Langtry, Texas.

Land use is shown for 1963 and 1973 in order to indicate possible trends.

<u>Use</u>	<u>Land Use*</u>			
	<u>Acreage</u>		<u>Per Cent</u>	
	<u>1963</u>	<u>1973</u>	<u>1963</u>	<u>1973</u>
Ranching	59,600	39,000	55	36
Residential	40	40	--	--
Wildlife**	22,735	41,165	21	38
Recreation	1,080	3,250	1	3
Big Bend National Park	<u>24,915</u>	<u>24,915</u>	<u>23</u>	<u>23</u>
Total	<u>108,370</u>	<u>108,370</u>	<u>100</u>	<u>100</u>

* Data were obtained from rancher interviews and ranch plans developed by the Soil Conservation Service of the Department of Agriculture.

** Includes 15, 155 acres of the Black Gap Wildlife Management Area.

The trend along the corridor is toward more lands available for wildlife purposes and recreation and the reduction in the number of acres devoted primarily to ranching.

Ranching is defined as the use of land primarily for livestock grazing, including small irrigated pastures that are grazed. Lease hunting of deer, antelope, javelina, quail, and doves is prevalent, but ranching is the dominant use. Cattle and sheep are the most common types of domestic grazing animals found in Brewster, Terrell, and Val Verde counties. The average ranch size is approximately 15,000 acres. The river canyons are seldom used by domestic livestock for grazing or water upstream from San Francisco Canyon (See Area Map, page iv). Concentrated livestock grazing on both sides of the river is more evident downstream from San Francisco Canyon. All of the areas used for ranching are leased for deer hunting during the hunting season.

Ranching has had the largest historical effect on the river area. The present vegetation along the Rio Grande differs greatly from the highly developed plant communities which once characterized the area. Retrogression probably began with the first heavy grazing by domestic livestock of early Spanish settlers. A subsequent history of continuous, heavy grazing, associated with droughts and the harsh environment of the area, contributed to continued deterioration of the original vegetation and gradual replacement by the present vegetation.

Stocking rates on a given site vary according to fluctuation in annual forage production and direction of plant succession. Stocking rates may vary from 3 to 20 animal units per section on the more productive soils (Gila-Glendale Association), or from 1 to 6 animal units per section on the low producing shallow, upland soils (such as the Ector-Lozier Association; see General Soil Map).

Plant succession is very slow in the desert climate along the Rio Grande. There are various range management alternatives that can be used to accelerate plant succession. Sound grazing management practices such as proper grazing rates and long deferment periods are essential to improving and maintaining higher states of plant succession. Complete exclusion of grazing, in most instances, would probably not significantly improve vegetative conditions over that under sound conservation grazing management.

The residential areas include Langtry, Texas with a population of about 136, and a housing area for employees of the DuPont Corporation in the United States across from the DuPont La Linda Mill in Mexico. Recently two ranches have been sold to development corporations for possible subdividing or second home development; however, no development has begun at this time. Both ranches include lands within the proposal area and detailed development plans are not available. Cabins used temporarily by ranch workers or hunters are not considered in the tabulation of residential acreage. As land values increase due to development potential,

ranch sales and fragmentation can be expected to increase.

Acreage contained in the wildlife land use category is used exclusively for big game and other forms of wildlife and hunting is allowed seasonally. Such areas are not used for livestock grazing. Acreage figures include 15,155 acres contained in the Black Gap Wildlife Management Area. Due to the availability of fish and wildlife and the ruggedness of the lower canyons of the Rio Grande, many landowners have developed fish and wildlife related recreation areas as primary or secondary land uses. Approximately 8-10 primitive fishing and hunting camps have been constructed within the proposal area. The success of hunting and fishing as an exclusive ranch use in the past three to six years has caused a significant land use change from ranching to wildlife. Possible explanations for this change include the increased value of hunting and fishing leases in comparison to returns from normal ranching operations, and the greater number of absentee landowners without the ability or desire to operate and manage a ranching operation.

The tabulation of acreage devoted to recreation (outside of Big Bend National Park) includes the narrow flood plains along the Rio Grande used for fishing, camping and boating activities.

Big Bend National Park area is not used for livestock grazing nor is hunting allowed. Land use in the Park is primarily resource protection and development for public use.

Recreation

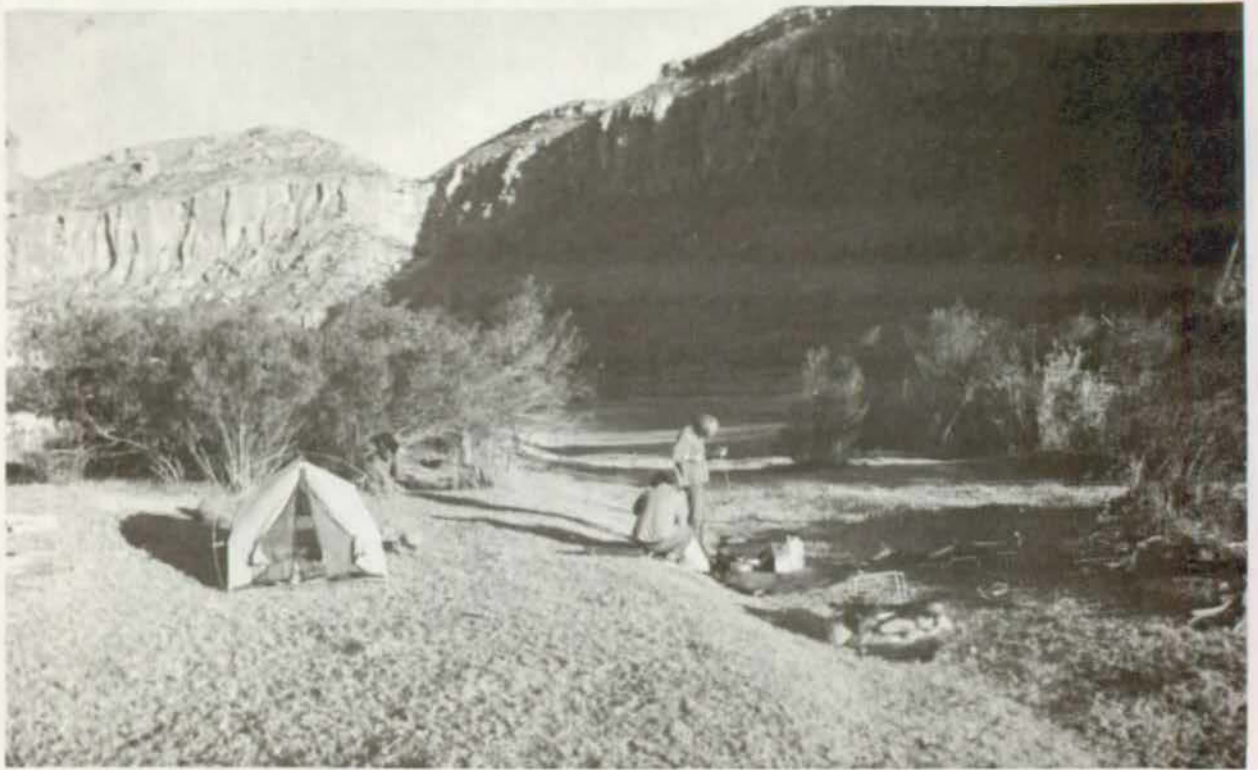
Existing Use of the River

Existing public recreational use of the proposed wild and scenic river area outside of Big Bend National Park is minimal. Until recently very few people were aware of the recreation potential of the Rio Grande downstream from the Park. Before 1965 it is probable that fewer than 100 people had canoed or rafted the "lower canyons" (estimate by Texas Explorers Club). In the mid 1960's this area became better known through the activities of Texas conservation organizations and through articles in national publications such as Field and Stream and Sports Illustrated. With recognition of the area's potential, recreational use has increased. It is estimated that 200 to 300 people floated the lower canyons in 1973. Only 130 float trip participants registered at the Black Gap Management Area, the major access to the lower canyons. The remaining river users, approximately 70-170, gained access across private land.

The number of people who obtained permits for float trips in Big Bend National Park increased from 3996 in 1969 to 4850 in 1973, an increase of approximately 5 percent per year.

Projected Use of the River

Estimates of recreational use for the proposed wild and scenic riverway are based upon existing river use figures within Big Bend National Park, and assume trends similar to those forecast by the National Park Service for the entire Park. It is estimated that approximately 7655 people will float portions of the riverway the fifth year after designation and 12,370 people the tenth year. Projections of recreation use in relatively remote areas such as the proposed segment of the Rio Grande are readily susceptible to changing economic conditions and the future availability



Recreational use of the Rio Grande



and cost of petroleum products used in private transportation. It should be noted that future recreational use of the proposed riverway will be carefully monitored to insure that such use does not destroy the river environment's outstanding natural qualities.

Facilities






Although most of the developed recreational facilities in the area are confined to Big Bend National Park, a number of minor recreational facilities are present further downstream. A general description of each recreational facility affecting the proposal area is provided.

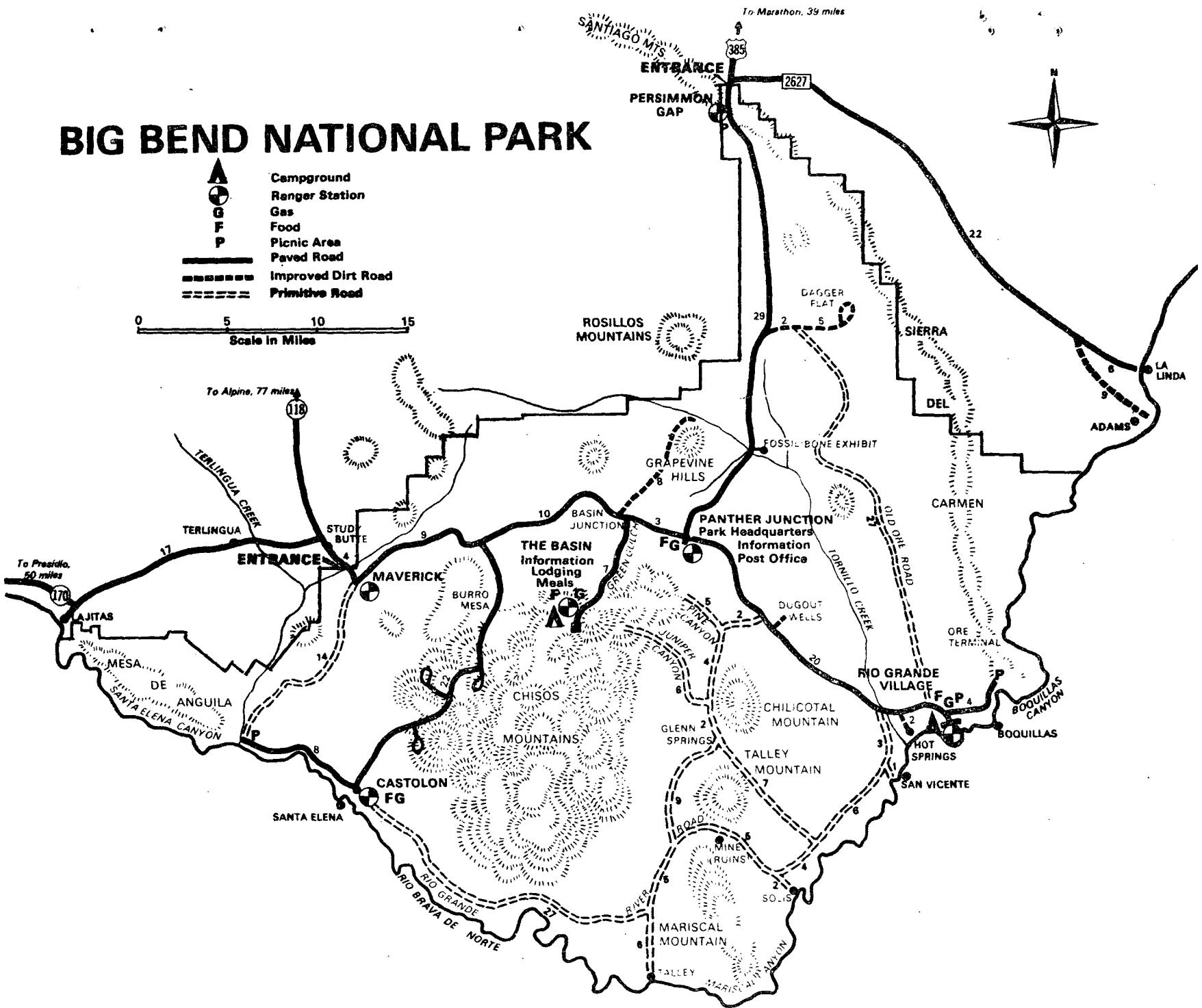
Big Bend National Park - In order to preserve an area with outstanding natural and cultural qualities, the citizens of the State of Texas purchased the southern portion of the Big Bend country and deeded it to the Federal Government. This area was authorized as Big Bend National Park in 1935 and officially established in 1944. Prior to 1944 a portion of the area was known as Texas Canyons State Park.

Presently the Park includes over 708,000 acres of both lowland Chihuahuan Desert and mountain scenery, and is the only national park which contains an entire mountain range, the Chisos Mountains. The Park also includes spectacular scenery and geologic features and possesses an outstanding array of Southwestern flora and fauna.

Recreation facilities on or near the river in Big Bend National Park are found primarily at Rio Grande Village. This complex is open all year and includes a 99 site Type A campground (sites have a parking space, grill, picnic table, and access to sanitary facilities and potable water

BIG BEND NATIONAL PARK

-  Campground
-  Ranger Station
-  Gas
-  Food
-  Picnic Area
- Paved Road
- Improved Dirt Road
- Primitive Road



M E X I C O

supply), a group campground, a 24 space trailer village, picnic area, general store and service station, and a self-guided nature trail. A primitive road traverses the southern end of the park and at several points provides access to fishing camps provided by the National Park Service. Seven such fishing camps are found along the river. Other river-related recreation facilities include the Boquillas Canyon Overlook and a short trail into Boquillas Canyon.

It is estimated that about three-quarters of the park visitors are Texans. Visitation at Big Bend National Park through 1973 increased significantly as shown in the following table.

<u>Calendar Year</u>	<u>Visitors</u>
1967	173,000
1968	192,000
1969	200,000
1970	173,000
1971	247,000
1972	290,000
1973	341,000
1974	159,000
1975	275,500

It is probable that the decrease in 1974 visits is due to uncertainties over fuel costs and supplies.

The National Park Service has recommended that 533,900 acres within Big Bend National Park be added to the National Wilderness Preservation System and that an additional 25,700 acres be designated as potential wilderness additions. Two of the units proposed for wilderness designation are adjacent to the reach of the Rio Grande under study; a 22,100

acre area which includes seven miles of the north side of Mariscal Canyon, and an elongated wilderness unit of 131,100 acres which encompasses the United States portion of Boquillas Canyon. The President and Congress of the United States must approve appropriate legislation on the wilderness proposal prior to wilderness designation. Wilderness designation will complement the wild and scenic river proposal within the Park.

Black Gap Wildlife Management Area - Black Gap is operated as an experimental wildlife management area by the Texas Parks and Wildlife Department. The unit consists of 102,258 acres of which 75,885 acres are owned by the State and 26,373 acres are leased. Special studies concerning various species of wildlife are conducted, including a study designed to reestablish desert bighorn sheep in Texas.

The Texas Parks and Wildlife Department does not have authority to manage for general recreation within the wildlife area; however, 25 partially enclosed and covered shelters are provided along the Rio Grande within the proposal area. The shelters in the Black Gap area are provided primarily for the use of fishermen who have nearly 22 miles of riverfront available to them. An unimproved road suitable only for high clearance vehicles follows the river within the proposal area for approximately 12-18 miles from Maravillas Creek to Horse Canyon and provides access to the fishing shelters previously mentioned. All activities of recreationists are strictly monitored to prevent interference with wildlife management activities. Recreationists must register at the headquarters and are requested to restrict their activities to within 300 yards of the river and to the roads. Yearly visitation figures of

recreationists for the period from 1968 to 1973 are shown in the following table:

<u>Year</u>	<u>Fishermen</u>	<u>Campers</u>	<u>Canoeists</u>
1968	389	37	-
1969	661	34	-
1970	846	69	-
1971	902	101	20
1972	1000	450	106
1973	1378	249	130

Private Areas - John's Marina is located on the Rio Grande south of Dryden and may be reached via an unimproved dirt road. This is a fishing camp and no facilities are provided, although an area for primitive camping is available. Approximately 5 other landowners along the river area have unimproved dirt ranch roads which reach the river. Permission may sometimes be obtained to gain access to these roads and the river.

Of special importance are the numerous private hunting and fishing leases which are found in the river area. Ranch lands are leased for hunting purposes primarily in two manners, a day-hunt lease or a yearly lease. Under a day-hunt lease, reservations are usually needed, fees are charged on a daily basis, and the hunter must check in and out with the landowner. In some cases an additional fee is charged for game taken. A yearly lease gives the lessee exclusive hunting rights on a specific parcel of land throughout the appropriate season. Because of the greater cost of a yearly lease such agreements are often used by hunting clubs or groups of individuals. Fishing leases are established in the same manner as hunting leases. Hunting and fishing leases have encouraged the construction of fishing and hunting camps near the Rio Grande. In some

cases the landowner can obtain a greater monetary return from leases than from normal ranching operations; therefore, an increase in this activity is expected.

Limiting Factors

The recreation potential of the Rio Grande is limited by several factors. Due to the relative isolation of this section, and the rough and rugged terrain, access and development for recreation use is restricted. In addition, the river area is removed from major metropolitan areas so that it is normally only those recreationists seeking a primitive experience who are attracted to the area.

The Rio Grande during some periods, primarily late summer and early fall, is highly turbid. Rises in water levels and subsequent turbidity are not normally conducive to water contact sports, with the exception of float trips. The potential for danger on float trips is greater when water levels are high due to increased water velocities and the presence of more exciting yet dangerous rapids and water falls. The extreme isolation of this section of the river presents a very serious problem for persons who might incur injuries.

Fishing is also limited by the high turbidity of the river. Suspended particles in the water do not create ideal circumstances for most species of game fish.

Lack of communications with river users in the Rio Grande canyons makes early warning of flash floods nearly impossible. Sudden rainstorms, mostly during June through October, can cause rapid rises in water levels and flash flooding in the tributary canyons. River users must observe

caution in the main river area in the immediate vicinity of and below larger tributaries, such as San Francisco Creek, and be cautious of selecting campsites in the tributary canyons. Recreationists planning to float the river should check in at Big Bend National Park or the Black Gap Wildlife Management Area and obtain information on flow conditions and possible hazards.

Potential

The Rio Grande has numerous recreation potentials and opportunities. Numerous archeological and historical sites are present, both of which are major attractions to recreationists. Many caves, showing signs of human habitation and numerous unique biological and geological formations, offer enticement for exploration. Rock collectors and climbers are also attracted to the area, and the outstanding natural qualities of the land have great potential to increase human knowledge through scientific study.

Ample opportunities for fishing are present as evidenced by the visitation figures of fishermen to Black Gap Wildlife Management Area. The river area has potential for establishing a limited number of quality camping areas in keeping with the primitive character of the river. The relative absence of any type of water quality deterrents except at high water levels is highly favorable for recreational use.

Existing uses of adjacent lands complement recreational use of the proposal area. A significant portion of the river area, 46 percent, is presently under public ownership and control, and the section contained within Big Bend National Park is already dedicated to recreational use. In addition, isolated sections of land are owned by the State of Texas and



The challenge of whitewater and,



the opportunity to explore a primitive environment.

are administered by the General Land Office. These lands could possibly be obtained for riverway protection and recreation purposes. The remainder of the lands bordering the proposal area (54 percent) are owned by private landowners and ranching activities predominate. Presently these ranching activities are not greatly disturbed by recreational use on the river. Recreational usage is largely restricted to the river and its canyons, thus allowing normal ranching activities to proceed on the uplands.

An outstanding asset of the Rio Grande is its scenic qualities. The river has cut magnificent canyons from the face of the desert. These canyons are spectacular, and tributaries have carved lateral or "side" canyons which offer extraordinary opportunities for exploration of the rugged environment adjacent to the river. The many caves, "pour-offs" (rock ledges which form waterfalls during runoff periods), water sculptured rocks and botanical and geological displays provided by the tributary canyons are an important facet of the recreational opportunities afforded by the Rio Grande. Numerous rapids have been formed which provide excitement and challenge for even the most experienced river runners.

PROBABLE FUTURE ENVIRONMENT WITHOUT THE PROPOSAL

Without the establishment of a wild and scenic riverway on the recommended segment of the Rio Grande, the long term changes in the environment could be substantial.

Existing public lands in Big Bend National Park and the Black Gap Wildlife Area will continue to be managed and administered under existing

authorities. It is probable that current land uses within these public areas will remain essentially unchanged. It is difficult to forecast what changes will take place on private land; however, it is probable that many of the existing large private landholdings along the river will become fragmented into smaller ownerships. The current trend toward more land dedicated to private wildlife, hunting, and fishing areas with less land used for grazing will likely continue. It is possible that at least one vacation home subdivision will be developed along the river. Although outside of the proposal area, one development of this type is presently found near the western boundary of Big Bend National Park. Should such development occur, wildlife habitat and ultimately the primitive character of the riverway could be lost.

Recreational use of the riverway will continue to increase. Because such use could be unplanned and uncontrolled, the existing environment could be adversely impacted. Without provisions for management and policing, trespass and litter could increase in proportion to the increase in the number of river users. Damage or disturbance to vegetation on bank areas frequently used by campers could occur. Without an adequate program of protection for existing archeological and historical sites, increased use could accelerate the disturbance or destruction of such sites. Due to the uncontrolled nature of future recreational use without the proposal and probable future bankside development, the quality of the recreational experience could decline.

Overall, the probable future environment without the proposal could be such that many of the scenic, natural, and recreational attributes now found along the Rio Grande would be lost.

III. ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

The Wild and Scenic Rivers Act directs that management of a river area as a component of the National Wild and Scenic Rivers System not limit other uses of the river that are consistent with the purposes for which the river was added to the National System provided those uses do not substantially interfere with public use and enjoyment of the river values. Two primary assumptions have been made in the evaluation of available data for the Rio Grande area. These are:

1. Public recreational use of the Rio Grande and its immediate environment will increase with or without designation as a component of the National Wild and Scenic Rivers System.
2. Designation as a component of the National Wild and Scenic Rivers System will accelerate the rate of recreation use.

IMPACT ON RECREATION

The Rio Grande has potential for providing quality outdoor recreation in a primitive, spacious setting. The area provides opportunities for sport fishing, hunting, camping, hiking, rafting and canoeing, and nature study, with rafting, canoeing and hiking being the primary activities.

In 1973 approximately 5,150 people floated the segment of the Rio Grande proposed for inclusion in the National System. Such use is projected to increase to 12,370 people the tenth year after designation. This increase will occur due to the nationwide attention given components of the National System and the additional public access and facility development provided. Hunting activity will remain essentially unchanged. Fishing activity will increase in line with increased canoeing and rafting activity.

There is an undetermined but definite capacity of the environment of the Rio Grande to withstand increasing use without impairment. Future recreational use would be limited to the amounts and types of outdoor recreation consistent with the objective of maintaining the existing environment unimpaired.

Overall, the impact of the proposal on recreation use in the Rio Grande area is considered of major importance.

IMPACT ON LAND OWNERSHIP

Current land ownership within the resource management area is approximately 46 percent public and approximately 54 percent private. Major public land holdings include Big Bend National Park and the Black Gap Wildlife Management Area. Presently there are 41 private landowners and over 50 percent are absentee owners.

Approximately 710 acres of streambed are in Federal ownership and nearly 1375 acres are in State ownership. Wild and scenic river designation would not change State ownership of the riverbed.

Implementation of the proposal will require acquisition of property rights in order to protect the natural scene and to accommodate existing and potential recreational use. Fee acquisition (no less than 1950 acres) will be confined to acreage needed to provide access and services to the general public and to protect the river and resource values which would be jeopardized if only scenic easements were purchased. Other land areas (no less than 5500 acres) within the resource management area will be controlled through the purchase of scenic easements.

Because implementation of the proposal will require acquisition of fee simple title (see Glossary) and scenic easements (see Glossary) private ownership of riverside lands will be affected. Where fee simple title is purchased all rights of ownership will be vested in the Federal Government. Where scenic easements are purchased, existing landowners would sell to the Federal Government the right to modify riverside lands from their current condition. Although scenic easement acquisition normally entails extensive negotiations with the landowner in order to determine the specific rights to be purchased, such easements normally include restrictions on future construction, clearing of vegetation, dumping, and other uses which modify the generally primitive nature of the environment.

IMPACT ON LAND USE

Private land within the resource management area (approximately 104 miles of river frontage and 7450 acres) is primarily used for commercial grazing and wildlife habitat. Big Bend National Park (approximately 65 miles of river frontage) is dedicated to resource protection and development for public use. The Black Gap Wildlife Management Area (approximately 22 miles of river frontage) is operated as an experimental wildlife management area, with mule deer, javelina, antelope, scaled quail, and desert bighorn sheep the principal game species managed. Lands used for residential purposes within the resource management area are minimal (10 acres).

The proposal would control domestic stock grazing on lands purchased in fee (1950 acres) by the National Park Service outside of Big Bend

National Park. Grazing is not allowed in the park. If it is determined that grazing should be excluded from lands purchased in fee the potential grazing loss is 5 to 34 animal units per year. Because the Wild and Scenic Rivers Act stipulates that purchase of a scenic easement shall not affect, without the owners' consent, any regular use (such as grazing) exercised prior to the acquisition of the easement, the impact upon grazing in the remainder of resource management area is considered minimal. Hunting will be permitted (except within Big Bend National Park) under existing State regulations to the extent that public use, enjoyment and safety would not be jeopardized. Fishing will be permitted under existing State regulations and authorities. Construction of new structures within the resource management area, other than those necessary for riverway administration, will be precluded through acquisition of lands and rights in land. Certain uses of owner's land will be foregone in the immediate river environment. As noted in the previous section, these uses would normally include restrictions on future construction, removal of vegetation, dumping, and other modifications which would affect the primitive character of the environment.

Overall, impacts of the proposal on existing or potential land use within the immediate environment will be moderate.

IMPACT ON WATER QUALITY

Water quality in the recommended segment is good and meets the Texas water quality standards which provide for contact recreation, propagation of fish and wildlife, and domestic raw water supply.

The proposal will accelerate the rate of annual recreation use in the river area from an estimated 5150 people in 1973 to a projected 12,370 people the tenth year after designation. Increased use may cause a health hazard

through indiscriminate disposal of human wastes. Concentrated use at informal float camping sites will also cause increased soil compaction and loss of vegetation through trampling or fire, thereby, potentially increasing the amounts of suspended sediments.

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With the amounts and types of anticipated outdoor recreation use associated with the proposal, overall impacts on water quality are considered minor.

IMPACT ON SCENIC QUALITY

The proposed Rio Grande Wild and Scenic River flows through a canyon environment cut into the face of the Chihuahuan Desert. Four major canyon areas are found within the recommended segment: Mariscal, Boquillas, and Martin Canyons and the "lower canyons" area. The entire river segment proposed for inclusion in the National System contains canyon environments and vistas with outstanding visual impact. The outstanding scenic qualities of the proposal area are due, in part, to the primitive and pristine nature of the river's surroundings.

Residential or commercial construction of structures within the resource management area will be precluded by purchase of lands and scenic easements. The primary purpose of purchasing scenic easements (see Glossary) is to protect the existing scenic qualities for the river user. An increase of approximately 7220 river users by the tenth year after designation will result in increased litter.

Because a basic purpose of the proposal is to retain existing outstanding scenic qualities of the immediate environment of the Rio Grande Wild and Scenic River, the impact of the proposal on preserving the existing scenic qualities is considered to be major.

IMPACT ON SOILS AND VEGETATION

The principal soils occurring in the river bottoms are, deep, calcareous loams, clay loams, and fine sandy loams developed on recent alluvium. Included in this association are small areas of gravelly and sandy stream washed materials occurring as sand and/or gravel bars. This association extends the entire length of the study area. Shallow, stony soils are found on the steeper slopes and within the canyon sections of the river. Included in this association are limestone outcrops in the steep canyon walls along the Rio Grande and its tributaries, as well as the talus covered slopes at the base of the rock outcrops. Soils of the recommended reach are subject to erosion when overgrazed or disturbed and are slow to recover.

The vegetation of the recommended segment is characteristic of the Chihuahuan Desert. A number of distinct zones of vegetation are found, ranging from riparian vegetation along the river, through the talus slope communities, to the true desert upland associations. In many cases grazing has modified the vegetation once characteristic of the area.

It is estimated that approximately 105 acres of land will be cleared or partially cleared to provide the suggested public access points and developed campgrounds. No significant clearing for campgrounds will take place immediately adjacent to the riverbank so that a screen of vegetation is retained to protect the view from the river. Permanent recreation facilities will be located primarily on vegetation of the vega association and, thus, vegetation lost due to facility construction will consist mostly of grasses, saltcedar, and willows.

Implementation of the proposal will protect, where practical, outstanding botanical associations, including threatened and endangered species, on lands which are purchased in fee title by the National Park Service. In addition, the proposal will retain the existing character of the vegetative communities along the riverway and, through management of resources and people, protect fragile soils from degradation.

With increased use, soil compaction, loss of plant cover, and increased erosion can be expected at developed campgrounds and informal campsites. Further, with more people visiting the area there could be a substantial increase in the threat of range and brush fire. Overall, the proposal is considered to have a moderate impact on soils and vegetation.

IMPACT ON FISH AND WILDLIFE

There is an abundance of game fish, including bass and channel catfish. Also, river carpsuckers, carp, bullhead catfish, alligator and long-nosed gar are plentiful. Presently, the proposed segment of the river receives very little fishing pressure outside of Big Bend National Park and the Black Gap Wildlife Management Area. Detailed use figures for fishing are not available within Big Bend National Park; however, use figures for the Black Gap Wildlife Management Area indicate that 1378 fishermen registered in 1973. Fishing pressure will be accelerated by the proposal; however this impact is considered minimal.

Mammals found include mule deer, javelina, raccoon, bobcat, coyote, striped skunk, ringtail, and gray fox. In addition, mountain lion are present though rarely seen. Bird life is abundant and includes some of

the remaining resident American peregrine falcons in Texas, an endangered species. Since nesting peregrines are easily disturbed by human activity, increased recreational use of the riverway during critical periods in the nesting cycle may have an adverse impact on this endangered species. The management program developed for the riverway must provide special protection of active aeries, such as restrictions on human activity within sight of occupied aeries.

A site in Black Gap Wildlife Management Area has been identified as an existing access point and as a potential campground. If such development takes place, probable increased use may have an adverse impact on wildlife management in the immediate vicinity. It will be necessary for the administering agency to take this into consideration in its master plan so that wildlife management and recreation use can be compatible.

Wild and scenic river designation is being proposed for the qualified segment of the Rio Grande so that the outstanding natural qualities contained within the proposed area can be retained for the benefit and enjoyment of present and future generations. Because such a philosophy will be an integral part of future riverway administration, it is probable that the long term impact of the proposal on fish and wildlife resources will be minor and beneficial.

IMPACT ON WATER RESOURCE DEVELOPMENT AND WATER USE

The potential water resource and river control projects are those authorized by the 1944 Water Treaty and the 1970 Boundary Treaty. The 1944 Treaty provides that a storage dam may be constructed between Santa Elena Canyon and the Pecos River; however, the International Boundary and Water Commission does not presently have any plans for major storage works in

this reach of the river. The 1944 Treaty further states that either government may divert and use its allotted water and may construct the necessary works for such diversion between Fort Quitman, Texas, and the Gulf of Mexico. For this purpose the United States and Mexico may under the Treaty construct such dams and other joint works required for diversion of the flows of the river. Also under the 1970 Boundary Treaty, the two countries may agree to channel works to preserve the river boundary and either country may install bank protection works to protect its lands.

Certain provisions of the 1944 Treaty and the 1970 Boundary Treaty are contrary to and supercede the objectives of this Wild and Scenic River proposal. Designation of the Rio Grande as a component of the National system will not affect the existing Treaties between the United States and Mexico relating to the Rio Grande.

The Texas Water Rights Commission has identified one permit and two water right claims in the recommended river reach: a permit owned by the National Park Service at Rio Grande Village, and two claims to water for irrigation at Stillwell Draw and approximately 20 miles west of Langtry, Texas. The two irrigation claims are presently under adjudication. The proposal will not affect existing water rights.

It should be recognized that designation of the Rio Grande preserves the status quo with respect to the law of water rights. Established principles of law will continue to determine the Federal and State jurisdiction over the Rio Grande. The Federal Government must pay just compensation for a water right taken for wild river purposes if the water right is a vested property right under established principles of State or Federal law.

Additionally, designation of any stream or a portion thereof is not to be considered a reservation of unappropriated waters other than for the purposes of the Wild and Scenic Rivers Act - and no greater quantities than are necessary for those purposes.

The establishment of a Rio Grande Scenic River does not affect or impair any prior valid water right vested under State or Federal law.

IMPACT ON HISTORICAL AND ARCHEOLOGICAL FEATURES

A Texas Historical Commission study has recorded more than 100 archeological sites in the proposal area. It can be assumed, based upon the subject evaluation, that additional archeological sites will be found upon further investigation. Unless an adequate ongoing program of identification and protection is developed, increased recreation use would result in increased vandalism and destruction of scientific values of many of the sites. Due to riverway designation and the need to comply with Executive Order 11593 additional surveys will be undertaken. Additional sites will be identified and protected. The Hot Springs area, approximately 2 miles upstream from Rio Grande Village is on the National Register of Historic Places. No other sites within the proposal area are on or have been nominated to the Register. No structure of major historical significance has been identified within the proposed area outside of Big Bend National Park. The abandoned "waterworks" at Sas Jones, although not of major historical significance, will be retained in its current condition as an interpretive tool to enhance the experience of the river user. Future planning for the riverway will identify and nominate where appropriate significant cultural resources to the Register.

The increased visitation which would accompany designation of the 191.2 mile segment of the Rio Grande and its immediate environment as a wild

and scenic river may cause serious damage to any archeological features not adequately protected; consequently the impact of the proposal could be significant. The proposal would have a protective and minimal impact on cultural resources.

IMPACT ON TRANSPORTATION

Because of the rugged nature of the recommended river segment, public access is limited. No major roads or railroads parallel the river and only one bridge, a private structure at La Linda, Coahuila, crosses the river. Two paved roads reach the river, one at Rio Grande Village in Big Bend National Park and the other, Ranch Road 2627 at La Linda. Access to the river on unimproved roads, often passable only by four-wheel drive vehicle, is available at several points in Big Bend National Park (See map on page 69) and in the Black Gap Wildlife Management Area. Approximately 6 private landowners have unimproved private ranch roads which reach the river in the proposal area.

The proposed designation of the Rio Grande as a wild and scenic river will control use and further development of roads within the resource management area except where deemed necessary by the National Park Service. Additional bridge, powerline, pipeline, or other similar crossings will be planned for environmental compatibility with the objectives of river designation. The private airstrip southwest of La Linda is outside of the resource management area and, the proposal will cause no change in its use. Overall, the impact on transportation is considered moderate.

IMPACT ON LOCAL ECONOMY

The only significant economic activities involving the resources of the proposed Rio Grande Wild and Scenic River are grazing, and lease hunting and fishing. Presently, grazing in canyon areas is limited due to the

rugged topography. The maximum loss to grazing would be 1950 acres and 5 to 34 animal units per year. Thus, the impact of the proposal on economic returns from grazing is expected to be minor.

Should mineral deposits be identified in the river corridor mining would be precluded. The future impact of such a restriction is unknown. Hunting (except within Big Bend National Park) and fishing will be permitted under existing State regulations and authorities to the extent that public use, enjoyment, and safety would not be jeopardized. Because hunting and fishing would continue, impact on income from hunting and fishing leases will be minimal.

Because the proposal will increase the number of people visiting the area annually (See Impact on Recreation), there will be a beneficial impact on the local economy. This could involve the creation of new service oriented businesses such as canoe and raft rentals, guide and outfitting operations, private campgrounds, motels, and restaurants. In addition, expansion of existing service businesses would most likely occur. Although tourism is a major component of the economies of Brewster and Val Verde Counties, in the past it has played a very minor role in Terrell County. Therefore, it is probable that increased tourism would have the greatest impact on the economy of Terrell County.

Conversion of 1950 acres of land into public ownership will result in an estimated annual tax loss of \$150 to Brewster and Terrell Counties.

IMPACT ON MINING

Very little data is available on the mining and mineral resources of the proposed area; therefore, the mineral potential of the area is uncertain.

The only operating mine near the proposal area is the DuPont Corporation's

fluorspar mine at La Linda, Coahuila. No fluorspar deposits have been identified near or adjacent to the Rio Grande in the United States. Because of the occurrence of fluorspar in adjacent areas in Mexico the potential exists that such deposits may be discovered within the proposal area. Implementation of the proposal as outlined would preclude the extraction of fluorspar if found in the United States. The impact on the existing mine in Mexico would be determined by the Government of Mexico.

Quicksilver or mercury has been mined in the Terlingua district north and northwest of Mariscal Canyon; however, presently there are no active mercury mining operations in or adjacent to the proposed area. Should mercury deposits be identified in the future extraction would be precluded within the riverway boundaries.

Although sub-bituminous-grade coal has been mined in the Terlingua district no deposits of this type have been reported in the proposal area. Should coal be discovered within the proposal area boundaries in the future, extraction would be precluded.

No exploitable gas or oil deposits have been identified beneath the area of interest. Should such deposits be found modern slant-hole techniques can be used to reach any such deposits from drilling sites located above the canyon rim and out of view of the river bottom.

No sand and gravel extraction operations presently exist in the riverbed. Due to the international nature of the stream and the prohibition of channel modification, it is doubtful that such operations would be permitted.

IV. MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

Within two years after designation as a wild and scenic river, lateral boundaries and specific management and development plans would be prepared by the National Park Service. Measures to reduce or control adverse environmental impacts resulting from the proposed designation of the Rio Grande as a wild and scenic river will include the following actions:

1. Restriction of the amount and type of outdoor recreation use throughout the river area to the carrying capacity (See Glossary) of the affected resources in order to prevent any impairment of those values which caused the river to be designated.
2. Implementation of protective measures to reduce the threat of fire. This could involve limiting the use of open fires or designating specific areas where open fires would be permitted.
3. Reduction of litter by stressing a program of "Bring out what you take in." Should this prove ineffective, consideration would be given to banning cans, bottles, or other non-burnable containers.
4. Application of uniform regulations for the use of motorized access by boats and off-road vehicles. This would include specific regulations for public safety; water pollution threats; damage to soil and vegetation; harassment of wildlife and livestock; and conflicts with people using the area. Motorized travel would not be permitted in the river areas classified

as wild (both land and water areas), except for management and emergency purposes. The use of motorized watercraft for recreating purposes would be limited in river areas classified as scenic.

5. Identification of any nesting sites of the American peregrine falcon-- an endangered species--and protection by restricting human encroachments during the critical periods in the nesting season. All threatened and endangered floral and faunal species will be protected in accordance with the Endangered Species Act of 1973.
6. Identification of historical and cultural sites through survey in order to provide appropriate protection pursuant to Executive Order 11593. This action would be initiated early in the detailed planning process. The criteria of effect as stipulated in Section 106 of the National Historic Preservation Act will be applied and all activities that affect cultural resources will be coordinated with the Advisory Council on Historic Preservation and will follow the procedures outlined under Section 106 of the National Historic Preservation Act.
7. Provision of recreation facilities only to the extent necessary to protect health and safety. Construction of new facilities would be undertaken only after careful assessment of their location and probable environmental impacts. An environmental assessment of the master plan and management program, to be developed by the National Park Service after proposal authorization, will be prepared prior to final adoption of such plans.
8. A program for monitoring water quality will be established. Monitoring will include possible increases in heavy metal contamination.

V. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Minor adverse environmental impacts will occur as a result of the designation of the Rio Grande and its immediate environment as a wild and scenic river. These are:

1. Increased numbers of people visiting the proposal area annually would require the establishment of regulations on use to protect the existing environment and to maintain a level of use consistent with the carrying capacity of the area. These regulations on use and the potential limitation of use would cause some loss of visitors' personal freedom to recreate where, when, and how they might otherwise choose.
2. The amount of increased litter, pollution of water, and noise pollution associated with more people visiting the proposal area annually, which cannot be fully mitigated through management techniques, would adversely affect the area. These impacts are expected to be minimal.
3. The increased threat of fire resulting from increased human use of the proposal area cannot be fully mitigated.
4. Soil and vegetation would be disturbed and loss would occur at the proposed development sites. The extent of this impact cannot be fully determined until the master plan is prepared, but it is expected to be minor.
5. Limited disruption of wildlife would occur during the construction of the development sites.
6. Acquisition of approximately 1950 acres in fee simple title would result in an estimated annual tax loss of nearly \$150 to Brewster and Terrell Counties.

7. Until protective programs are established for archeological and historical sites along the river, vandalism and possible loss of site integrity may occur.
8. Contribution, if any, to the local economy through mineral exploration or development of vacation home subdivisions would be foregone in the resource management area.

VI. RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

Inclusion of the 191.2-mile segment of the Rio Grande and 9,600 acres comprising its immediate environment in the National Wild and Scenic Rivers System will insure maintenance and enhancement of long-term productivity of the included area.

Since no major physical change is planned, the existing environment will be essentially unimpaired for the use and enjoyment of present and future generations. Environmental protection will be accomplished through specific rules and regulations and acquisition of lands in fee simple title and scenic easements.

The existing short-term uses of the environment (grazing, recreation, and wildlife habitat) will remain substantially unaltered under the proposal. Short-term economic gain would be foregone from the development of vacation home subdivisions.

VII. IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION

No major physical changes to the existing environment are planned. Accordingly no resources will be irreversibly or irretrievably committed. By designating the Rio Grande as a component in the National Wild and Scenic Rivers System, all natural resources in the river corridor are committed to the management objectives of preserving the river in its free-flowing condition and the protection of the river and its immediate environment for the benefit and enjoyment of present and future generations.

Designation of the recommended segment of the Rio Grande by the Congress as a wild and scenic river in the National System can be modified or reversed by the Congress should it be in the national or international interest at some future time.

VIII. ALTERNATIVES TO THE PROPOSED ACTION

Alternatives considered for the proposed Rio Grande Wild and Scenic River are as follows:

1. No action
2. Protection through State and local action
3. Inclusion of different segments within the National Wild and Scenic Rivers System
4. Inclusion in the National Wild and Scenic Rivers System with joint Federal-State administration
5. Inclusion in the National Wild and Scenic Rivers System with State administration

NO ACTION

The no action alternative assumes that the qualified segment of the Rio Grande would not be included in the National System, nor would State or local units of government take steps to manage the area for preservation and recreation purposes. The river segments within Big Bend National Park and the Black Gap Wildlife Management Area would continue to be managed under existing programs and authorities. All remaining river-side lands would be retained in private ownership.

Impacts

Current patterns of land use and development would continue. Land use trends of ranching increasingly supplemented by private leases for hunting and fishing would also continue. It is probable that existing land ownership patterns would become more fragmented as large ranches are partitioned and sold for development or tax purposes. It is probable the current land use within Big Bend National Park and the Black Gap Wildlife Area will remain essentially unchanged. Recreational use of the river would undoubtedly continue to increase, although at a lesser rate than if the area was included in the National System.

Although current resident landowners are strongly tied to the land and the ranching way of life, the increasing number of non-resident landowners indicates a trend toward speculation and a greater potential for development. Uncontrolled bankside development would lead to the eventual loss of the primitive values which presently are characteristic of the study segment. The study segment is a resource of national interest and ultimately the characteristics which make it so would be lost under the no action alternative.

PROTECTION THROUGH STATE AND LOCAL ACTION

Two options were considered under this alternative: (1) Protection through local action and (2) Inclusion in a State scenic rivers system.

Local:

Because the land area adjacent to the proposed area is sparsely populated and local county governmental controls are minimal, it is highly unlikely that a meaningful river protection program could be developed at the county level. Brewster and Terrell counties had 1970 populations of 7,780 and 1,940, respectively. These counties have no zoning power, and it is highly unlikely that counties in Texas will obtain and implement zoning powers in the near future. In addition, the two counties do not have the funds necessary to administer and manage a riverway program.

State:

Bills to establish a statewide scenic rivers system in Texas have been introduced into the State legislature on several occasions. All such efforts have been unsuccessful to date; however, a statewide system may be established by the legislature in the future. The type and extent of

protection which might be given the Rio Grande under a State system is uncertain.

Impacts

Because protection through local action is doubtful, the impact of this action would essentially be the same as the no action alternative. Because the extent and type of protection afforded the riverway in a State scenic rivers system is uncertain the impact is unknown. If a State system provided designation only with no land use controls, the impact would be essentially the same as the no action alternative. If a strong State system, including acquisition authority were developed, the impact would be similar to that of the proposal.

INCLUSION OF DIFFERENT SEGMENTS WITHIN THE NATIONAL WILD AND SCENIC RIVERS SYSTEM

Two major boundary changes or options have been considered. Both are reductions in size from the proposal. For a comparison of the proposal and the segment options considered see page 100 .

Option 1. From River Mile 842.3 to the downstream boundary of Big Bend National Park - This option contains only that portion of the study segment presently included in Big Bend National Park, a distance of 65 miles. No private lands would be acquired and the only additional facility development would be an access point near the downstream boundary of the Park.

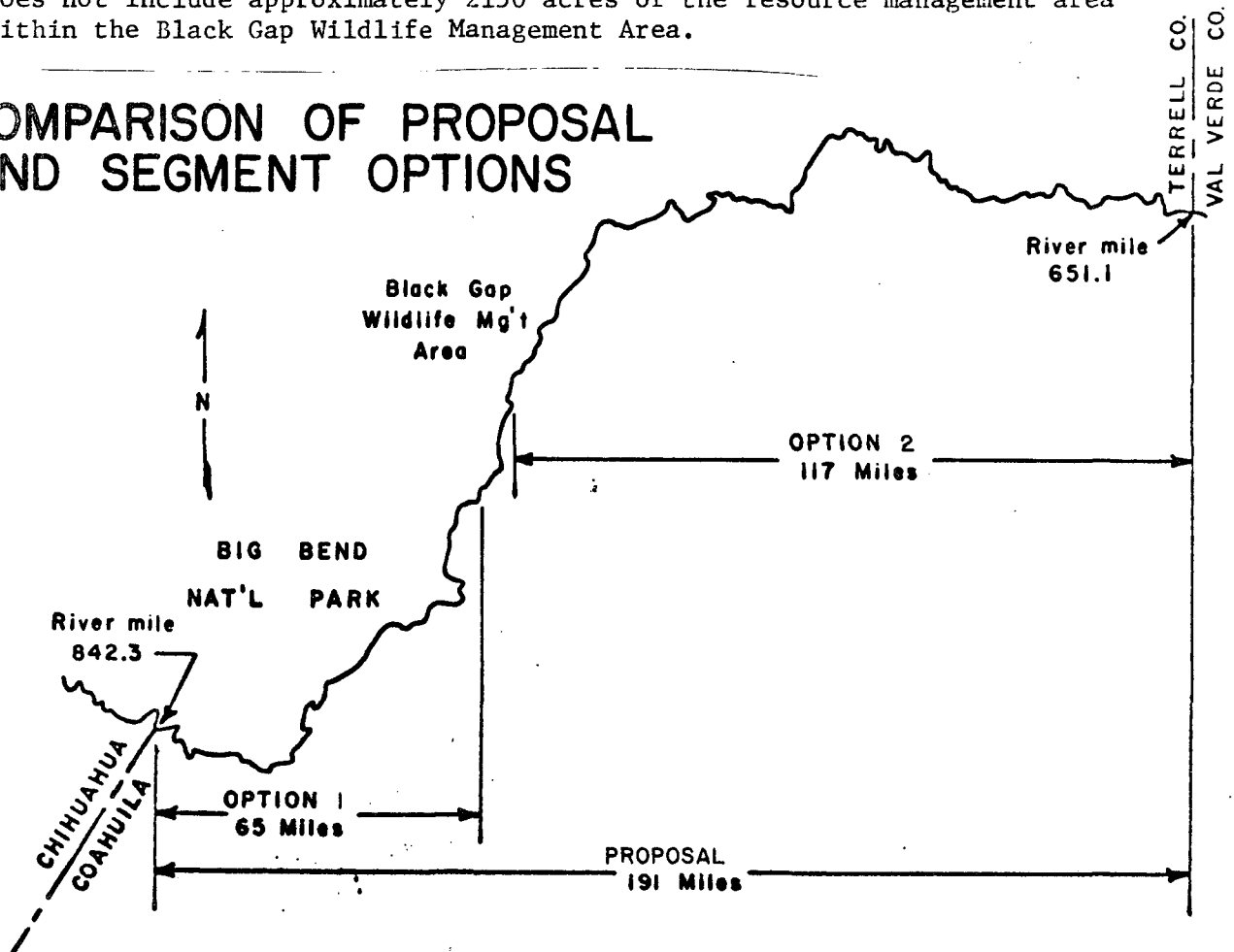
Comparison Summary

Comparison Factors	Proposal	Option 1	Option 2
Length	191 miles	65 miles	117 miles
Percent of River Frontage in Public Ownership	46%	100%	19%
Resource Management Area Minimum Acreage	9600 acres*	entire area is within Big Bend National Park 9100 acres*	
Suggested Minimum Fee Acquisition	1950 acres	0	1940 acres
Suggested Minimum Easement Acquisition	5500 acres**	0	5010 acres**
Estimated Acquisition Costs	\$1,100,000	0	\$1,025,000
Estimated Development Costs	\$1,300,000	\$25,000	\$1,272,000
Total Costs	\$2,400,000	\$25,000	\$2,297,000

*Does not include area within Big Bend National Park.

**Does not include approximately 2150 acres of the resource management area within the Black Gap Wildlife Management Area.

COMPARISON OF PROPOSAL AND SEGMENT OPTIONS



Option 2. From the upstream boundary of the Black Gap Wildlife Management Area to River Mile 651.1 (the Terrell-Val Verde County line) - The resource management area for this segment option contains approximately 9100 acres and 117 miles of the Rio Grande. This segment option is similar to the proposal; however segment option 2 does not include riverfront lands within Big Bend National Park or any lands upstream from the Black Gap Wildlife Management Area.

Total segment length is 117 miles, of which approximately 19% is in public ownership. This segment includes the presently unprotected "lower canyons" area and Martin Canyon.

Impacts

Inclusion of only the river segment within Big Bend National Park would have a minor impact on that river segment. Existing management programs of the National Park Service along the riverway would remain essentially unchanged. Future administrative and management decisions regarding the subject river area in the Park would be made within the framework of the Wild and Scenic Rivers Act. The river corridor left unprotected downstream from the Park would in the long run lose the characteristics which presently enable it to qualify for inclusion in the National System.

Inclusion of the 117 mile segment of the Rio Grande from the upstream boundary of the Black Gap Wildlife Management Area to the Terrell-Val

Verde County line would retain the outstanding characteristics now found in the area. The impacts would be the same as those for the proposal, however, the impacts discussed would not occur on the 74 mile river segment from the Chihuahua-Coahuila state line to the upstream boundary of the Black Gap Wildlife Management Area. No private lands would be affected between the National Park and the Black Gap Wildlife Management Area and no additional access would be provided in the subject 74 mile river reach.

INCLUSION IN THE NATIONAL WILD AND SCENIC RIVER SYSTEM WITH JOINT FEDERAL-STATE ADMINISTRATION

This alternative envisions a Federal-State partnership in administration of a riverway program such as proposed. Existing areas managed by the respective levels of government would continue to be so managed. A riverway master plan would be jointly prepared which would delineate those river segments for which each agency would have administrative responsibility. Both State and Federal funds would be used for acquisition, development, and management. Federal participation in such administration would necessitate approval by the President and Congress. A significant amount of coordination would be necessary for a successful program; this process would slow program implementation. Delays in implementation would also occur due to the time period necessary for Congressional approval and approval by the Texas Legislature. Speculation and development on lands within the proposal area could increase during the delays mentioned. State approval might be difficult to obtain and State financial resources are limited which in turn might hamper a successful program of river protection.

Impacts

Because the protection program would be the same as the proposal the impact of joint Federal-State administration would be very similar to the impacts of the proposal. Due to the possibility of a greater time period to obtain authorization and funds for a riverway program, landowner uncertainty would be greater than for the proposal.

INCLUSION IN THE NATIONAL WILD AND SCENIC RIVERS SYSTEM WITH STATE ADMINISTRATION

This alternative would entail complete State administration and management of the designated riverway segment, outside of Big Bend National Park. The National Park Service would continue to administer the river area inside the park. The State would prepare a riverway master plan, and implement the provisions of that plan. Funds used for implementation would be obtained from normal State appropriations and applicable Federal grant programs. A State-administered component of the National Wild and Scenic Rivers System is possible through the provisions of Section 2(a)(ii) of the Wild and Scenic Rivers Act. This provision stipulates that the Secretary of the Interior may designate a State-administered stream as a National System component upon application of the Governor, after approval of the State legislature. Such areas must be administered at no expense to the Federal Government.

Impacts

The impact of State implementation of a riverway protection program would be very similar to the impact of the proposal. Because the amount of funds necessary for program implementation are a far greater proportion of a State's financial resources than they would be for

national financial resources, monetary restraints would be greater under this alternative form of administration. In addition, the Texas Legislature has shown a reluctance in the past to approve a Statewide System of scenic waterways and may have similar objections to a program on the Rio Grande. If the State of Texas cannot adequately carry out a wild and scenic river program the impact will be very similar to the no action alternative.

IX. CONSULTATION AND COORDINATION WITH OTHERS

A. CONSULTATION AND COORDINATION IN THE DEVELOPMENT OF THE PROPOSAL AND PREPARATION OF THE ENVIRONMENTAL STATEMENT

The study of the Rio Grande as a potential addition to the National Wild and Scenic Rivers System was a cooperative effort under the leadership of the Bureau of Outdoor Recreation.

Representatives of the following agencies were members of the reconnaissance group which conducted the study.

State:

Texas Parks and Wildlife Department

Federal:

National Park Service
Soil Conservation Service
U.S. Forest Service
U.S. Section, International Boundary and Water Commission

In addition assistance was received from the following agencies:

State:

Texas General Land Office
University of Texas Rare Plant Study Center
Texas Bureau of Economic Geology
Texas Historical Commission
Texas Water Quality Board
Texas Water Rights Commission
Texas Water Development Board

Federal:

State Department
Agricultural Stabilization and Conservation Service
Fish and Wildlife Service

International:

Mexican Section, International Boundary and Water Commission

In October 1973, a preliminary draft of the Rio Grande Wild and Scenic River study was distributed to the Federal and State reconnaissance group members for review and comment.

Public information meetings were conducted by the reconnaissance team in Austin, Texas, on December 11, and in Alpine, Texas, on December 12, 1975. The meetings were held in order to acquaint the public with possible alternative actions on the Rio Grande, and to obtain assistance in formulating recommendations concerning such alternatives. Approximately 150 people attended the Austin meeting. The majority of speakers (26 out of 29) presenting statements were in favor of Federal administration of the entire study segment as a component of the National Wild and Scenic Rivers System. Major concerns expressed dealt with the extent of fee and scenic easement acquisition, adequate landowner compensation, the ability of the administering agency to adequately enforce management regulations, actions by the Government of Mexico to assume corresponding responsibilities along the river, and the possibility of including additional river segments in the National system. Approximately 75 people attended the Alpine meeting, most were landowners along the Rio Grande. Nearly all meeting participants were in favor of the "no action" alternative. A great deal of concern was

expressed concerning adequate compensation for land acquired, adequate policing and funding, feasibility of a wild and scenic river if Mexico does not pursue similar objectives, and the desirability of establishing a wild and scenic river with little facility development.

Careful consideration was given to the comments received at the meetings and comments received subsequent to the meetings. Over 700 individuals provided written comments with 36 percent preferring no action, 61 percent requesting inclusion in the national system, and 3 percent favoring protection through State and local actions. Many of those preferring no action did so with incomplete information on the alternatives presented, often confusing the study effort on the Rio Grande with the wilderness proposal at Big Bend National Park.

Although there has been close coordination and consultation on the resource information incorporated in the report, the conclusions and recommendations are those of the Bureau of Outdoor Recreation.

B. COORDINATION AND REVIEW OF THE DRAFT ENVIRONMENTAL STATEMENT

Copies of this draft environmental impact statement have been submitted to the following:

Advisory Council on Historic Preservation
Department of Agriculture
Department of Defense
Department of Commerce
Environmental Protection Agency

Department of Health, Education and Welfare

Department of Housing and Urban Development

Department of the Interior

Bureau of Indian Affairs

Bureau of Mines

Bureau of Reclamation

Fish and Wildlife Service

Geological Survey

National Park Service

Department of State

International Boundary and Water Commission

Department of Transportation

Water Resources Council

State of Texas

Office of the Governor

Division of Planning Coordination

Texas Bureau of Economic Geology

Texas Parks and Wildlife Department

Texas Historical Commission

Texas General Land Office

Texas Water Quality Board

Texas Water Development Board

Texas Water Rights Commission

Middle Rio Grande Development Council

Permian Basin Regional Planning Commission

West Texas Council of Governments

West Texas Chamber of Commerce

University of Texas (Rare Plant Study Center)

Interested Individuals and Organizations

C. SUMMARY OF CORRESPONDENCE RECEIVED FOLLOWING REVIEW OF THE DRAFT STATEMENT

A total of 65 letters were received on the draft environmental statement including letters from 11 Federal

agencies, 13 State agencies, 6 organizations and 35 individuals. All letters received are printed in the following pages with the exception of 30 letters which only voiced support of the Rio Grande proposal and did not address its environmental impact. As examples of this group, letters from Marsha McKinnerney and Max Zischkale, Jr. are printed at the end of Section IX.E. Most of the comments received from individuals specifically mentioned the Lower Canyons segment of the proposal.

The draft environmental statement was circulated for review of the data presented and comment on the adequacy of the environmental analysis. Many comments went beyond this and voiced support or rejection of the proposal itself. Those persons who desire to voice a position on the proposal will have every opportunity to make their interests known through legislative channels as Congress considers the proposed legislation.

Correspondence which provided additional data or raised questions concerning the adequacy of the draft statement are followed by a response page or pages.

Comments are numbered in consecutive order on each letter. The numbered responses on the pages which immediately follow each letter correspond to these numbers. Similar or identical questions were posed by more

than one reviewer. In most of these cases, the comment is fully addressed the first time it appears, with following or similar comments referred to by number and comment to the first response.

To facilitate this referral system, the letters are organized alphabetically in the following categories: Federal agencies, State agencies, local agencies, organizations, and individuals. An exception to this is the example letters that either did not address a specific proposal or voiced support or rejection of the proposal which are printed at the end of Section IX. E.

D. SUMMARY OF CHANGES FROM DRAFT STATEMENT

A number of minor editorial and factual changes have been made from the Draft Environmental Statement in response to numerous suggestions offered by Federal and State agencies as well as many private organizations and individuals. In addition, both Federal and State agencies have supplied additional data, some of it developed since the release of the Draft Statement. This data was incorporated wherever it contributed to better evaluation of impacts or alternatives to the proposal.

E. Correspondence Received

INDEX OF CORRESPONDENCE RECEIVED
(Excluding Individuals)

FEDERAL AGENCIES

Advisory Council on Historic Preservation

Department of Defense

Department of the Army - Corps of Engineers
Albuquerque District

Department of Health, Education, and Welfare

Department of the Interior*

Bureau of Indian Affairs

Bureau of Mines

Bureau of Reclamation

Fish and Wildlife Service

National Park Service

Department of State

International Boundary and Water Commission

Department of Transportation

Federal Highway Administration

Environmental Protection Agency

STATE AGENCIES

State of Texas (10 agencies)

The Honorable Susan McBee, Texas State Representative

Middle Rio Grande Development Council

West Texas Council of Governments

ORGANIZATIONS

Americans Backing Better Park Development

Guadalupe Wilderness Committee

Texas Committee on Natural Resources

University of New Mexico Mountain Club

West Texas Chamber of Commerce

The Wilderness Society

*The U.S. Geological Survey responded by telephone that they had no comments.

Advisory Council
On Historic Preservation

1522 K Street N.W.
Washington, D.C. 20005

AUG 26 1975

11
MA

Mr. Rolland B. Handley
Regional Director
South Central Regional Office
Bureau of Outdoor Recreation
Patio Plaza
5000 Marble N.E., Room 211
Albuquerque, New Mexico 87110

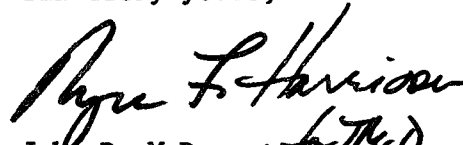
Dear Mr. Handley:

On August 15, 1975 the Advisory Council received Bureau of Outdoor Recreation's (BOR) adequately documented determination that its legislative proposal to designate 191.2 miles of the Rio Grande River into the National Wild and Scenic Rivers System would have no adverse effect on the Hot Springs Area, Brewster County, Texas, a property included in the National Register of Historic Places or other cultural resources which may be eligible for inclusion in the National Register. The Council staff has reviewed BOR's determination of no adverse effect and notes no objection to the determination.

In accordance with Section 800.4(d) of the Advisory Council's "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800) BOR may proceed with the undertaking. The Council looks forward to working with BOR and the National Park Service with regard to the resource management plan's compliance with Section 106 and Executive Order 11593 should the Congress approve this legislative proposal.

Your continued cooperation is appreciated.

Sincerely yours,



John D. McDermott
Director, Office of Review
and Compliance



DEPARTMENT OF THE ARMY
 ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
 P. O. BOX 1580
 ALBUQUERQUE, NEW MEXICO 87103

RS. DIO
 Hoff
 Long
 PK.
 S.H.

SWAED-EP

5 May 1975

Mr. Roland B. Handley
 Regional Director
 Bureau of Outdoor Recreation
 5000 Marble, N.E., Room 211
 Albuquerque, New Mexico 87110

Dear Mr. Handley:

The draft environmental statement on the Rio Grande Wild and Scenic River Study has been reviewed as requested in your letter of 17 April 1975 and found to adequately contain requirements of the National Environmental Policy Act of 1969.

The proposal evaluated in the statement would not conflict with any existing or contemplated work of the Corps of Engineers. Your proposal to include the Rio Grande from River Mile 842.3 to River Mile 651.1 in the National Wild and Scenic River System should make an excellent addition to the system.

Sincerely yours,

JASPER H. COOMBES, P.E.
 Chief, Engineering Division

MAY 27 1975





DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGIONAL OFFICE
1114 COMMERCE STREET
DALLAS, TEXAS 75202

170 517
J. Mangrove
D

OFFICE OF
THE REGIONAL DIRECTOR

May 5, 1975

Our Reference: EI# 1275-529

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Department of the Interior
Patio Plaza, 5000 Marble, N.E. Room 211
Albuquerque, New Mexico 87110

Dear Mr. Handley:

RE: Inclusion of Rio Grande
in National Wild and
Scenic Rivers System

Pursuant to your request, we have reviewed the Environmental Impact Statement for the above project proposal in accordance with Section 102(2) (c) of P. L. 91-190, and the Council on Environmental Quality Guidelines of April 23, 1971.

Environmental health program responsibilities and standards of the Department of Health, Education, and Welfare include those vested with the United States Public Health Service and the Facilities Engineering and Construction Agency. The U.S. Public Health Service has those programs of the Federal Food and Drug Administration, which include the National Institute of Occupational Safety and Health and the Bureau of Community Environmental Management (housing, injury control, recreational health and insect and rodent control).

Accordingly, our review of the Draft Environmental Statement for the project discerns no adverse effects that might be of significance where our program responsibilities and standards pertain, provided that appropriate guides are followed in concert with State, County, and local environmental laws and regulations.

We therefore have no objection to the authorization of this project insofar as our interests and responsibilities are concerned.

Very truly yours,

Wm F. Crawford
William F. Crawford
Environmental Impact Coordinator

CC: Charles Custard
Warren Muir

MAY 20 1975

RESPONSE TO COMMENTS BY
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

1. All efforts concerning the Rio Grande proposal would be in concert with State, county, and local environmental laws and regulations.

UNITED STATES GOVERNMENT

Memorandum

TO : Regional Director, South Central Region


DATE: JUL 10 1975

FROM : ^{Acting Deputy} Director, Office of Trust Responsibilities

SUBJECT: Review of Draft Environmental Statement - Rio Grande Wild and Scenic River

We have reviewed the subject draft you sent the Commissioner on April 17.

We find no impact on Indians or their lands. Thank you for the opportunity to review the report.



JUN 09 1975



United States Department of the Interior

BUREAU OF MINES
 WASHINGTON, D.C. 20240/ 20241

May 29, 1975

DES 75-29

W
6/9 26

Memorandum

To: Regional Director, Bureau of Outdoor Recreation, Albuquerque,
 New Mexico

Through: ^{Deputy} Assistant Secretary--Energy and Minerals *Rolland A. Reed*
 JUN 5 - 1975

From: Director, Bureau of Mines

Subject: Draft environmental statement, Bureau of Outdoor Recreation,
 proposed inclusion of the Rio Grande in the National Wild
 and Scenic Rivers System

Our Intermountain Field Operation Center, Denver, has reviewed your draft environmental statement concerning a proposal for inclusion of a 191.2-mile segment of the Rio Grande in the National Wild and Scenic Rivers System.

We note that most of our mineral-related comments made by memorandum of June 19, 1974, to the Chairman, Interdepartmental Study Group on Wild and Scenic Rivers, on the preliminary draft have been incorporated in this draft. We suggest that it also be added that an onsite mineral resource study has not been made of the area and that its mineral resource potential has not been fully evaluated.

Although we certainly appreciate the significance of this wild and scenic river proposal, we hope that field examinations of new proposals by qualified mineral personnel will be part of future reviews. The fact that a field mineral examination was not part of this review should be acknowledged in the mining section (pp. 45-48) of the final environmental statement, preferably following the opening sentence of the section.

T. V. Falkie
 Thomas V. Falkie
 Director

RESPONSE TO COMMENTS BY
BUREAU OF MINES

1. This suggestion has been incorporated into the text on "Mining" in Section II.



United States Department of the Interior

BUREAU OF RECLAMATION
WASHINGTON, D.C. 20240

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edit

IN REPLY
REFER TO: 746

121.

JUN 9 1975

Mr. Rolland B. Handley
Regional Director
South Central Regional Office
Bureau of Outdoor Recreation
Patio Plaza, 5000 Marble, N.E., Room 211
Albuquerque, New Mexico 97110

Dear Mr. Handley:

This is in response to your memorandum dated April 17, 1975, regarding the review of the draft environmental statement for the "Proposed Inclusion of the Rio Grande in the National Wild and Scenic Rivers System." We have reviewed the subject document and offer the following comments for consideration.

In general, the statement has adequate information and is basically well written. The section on impacts, however, does not appear to follow the format outlined in the table of contents. We suggest, therefore, that the section on impacts be checked and informational material which is in, or should be in, the section on "Description of the Environment," be deleted from the impact section. We believe the impacts could then be clearly stated and the ambiguities would be eliminated.

Page 19 - The Regional Transportation Network map presented here should identify Ranch Road 170 which traverses the study area. As presented here, it appears as though U.S. 67 extends into the study area which is certainly not the case.

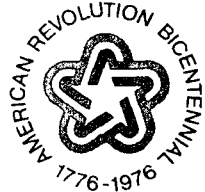
Page 20 - Although Ranch Road 170 would seem important to the study area and should be mentioned, we fail to see the significance of mentioning Ranch Roads 2810, 169, and 2627-particularly since these roads are not identified on the map on page 19.

We appreciate the opportunity to review the report.

Sincerely yours,

James J. Smith
Assistant
Commissioner

116



RESPONSE TO COMMENTS BY
BUREAU OF RECLAMATION

1. Ranch Roads 170 and 2627 are identified on the map of Big Bend National Park in Section II. Ranch Roads 2810 and 169 are located near US 67 extending from the vicinity of Marfa (west of Alpine) and joining the river and Ranch Road 170 at Ruidosa and below Presidio respectively. While probably not significant to the regional transportation network displayed on the map, these ranch roads are significant with respect to the river because there are so few paved roads extending to the river.



United States Department of the Interior

ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

*AA 7/11
Kenlan 7/11*

In Reply Refer To:
FWS/OBS/EA

JUL 9 1975

Memorandum

To: Regional Director, South Central Region, Bureau of
Outdoor Recreation
Deputy Associate

From: Director, Fish and Wildlife Service

Subject: Rio Grande (Texas) Wild and Scenic River Study--Review
and Comment on Draft Environmental Statement (DES 75-29)

This is in response to your memorandum of April 17, which requested comments on the subject environmental statement. The comments that also pertain to those we made on the report of the Rio Grande Study (our memorandum of June 2) are cross-referenced for convenience to the applicable report comment.

Also for convenience, the comments on threatened/endangered species of plants and animals are presented under a separate heading. Since most of the EIS text on vegetation and fish and wildlife is identical or quite similar to that of the report, much of this threatened/endangered species commentary applies also to corresponding parts of the report. While the material in our memorandum of June 2 on such species is still germane, the comments included here which also apply to the report are presented in a format that makes them somewhat simpler to apply. Therefore, we suggest primary, though not total, reliance on the report-applicable comments herein presented.

Specific review comments on the EIS are as follows:



Save Energy and You Serve America!

1. Black Gap Wildlife Management Area--Possible Conflict between Wildlife Management and Recreational Use (bottom page 13, and page 14). The IMPACT ON FISH AND WILDLIFE section (page 83-84) does not clearly discuss the wildlife/recreation conflict as one is led to conclude will be done by the cross-reference to that "Impact. . ." section on page 14. | 1
2. Water Quality Criteria (e.g., pages 32 and 80, and Appendix). See report comment No. 4. | 2
3. Chemical Pesticides Use. See report comment No. 12. | 3
4. Vegetation (pages 50-55). See report comment No. 11, paragraphs one and two. | 4

Threatened and Endangered Species

Only two species, the American peregrine falcon and the Big Bend mosquito-fish presently listed as Endangered, are known to frequent the section of the Rio Grande River proposed for inclusion in the Wild and Scenic Rivers System. However, twelve other species of plants and animals that occur in or near the area are either proposed for listing as Threatened or Endangered or are considered definite or possible candidates for proposed listing in the future. Should any adverse impact occur as a result of designating this section of the Rio Grande as a component of the National Wild and Scenic Rivers System, any of these unlisted species might become Endangered or Threatened as a result. Enclosure I is a tabulation for your information of all such vulnerable species including those already listed as Endangered. Included is a concise statement of the status of each and a brief description of its habitat within and near the area. The tabulated species are mentioned in the EIS and report texts, which are proposed for retention and revision. | 5

Probably, the most endangered of the species present is the American peregrine falcon. There are at least two active aeries in the study area. As a rule, human presence would have a negative influence on nesting peregrines. Management of recreation on the River should provide for measures to discourage disturbance that might disrupt reproduction of any active aeries. Certainly, no designated camping or resting areas should be located near any aeries, and recreationists should be prevented from any activity disruptive to nesting peregrines. Advisors thoroughly familiar with the behavior of these nesting peregrines should be consulted in setting up plans and regulations for recreational use of the river. | 6

Specific comments on threatened/endangered species follow in the numbered sequence of preceding EIS comments:

5. To avoid extensive explanatory material and to facilitate understanding of proposed changes in the text under Vegetation (page 55), on Fish and Wildlife (pages 56 and 57), and on Impact on Fish and Wildlife (page 84), we have included in Enclosure II proposed revision of the text of pertinent paragraphs in the above sections. | 7

6. Environmental Impact of River Designation on Threatened/Endangered Species (page 77, last paragraph).

It appears that the only serious adverse environmental impact that could occur as a result of Wild and Scenic River designation will be increased human recreational use. The Statement estimates that recreational use will increase from 5150 people in 1973 to 12,370 in the tenth year after designation. If this traffic is properly managed and contained, we do not believe that there will be an adverse impact on any of the species present, particularly in light of impacts that could occur if Wild and Scenic River designation did not take place.

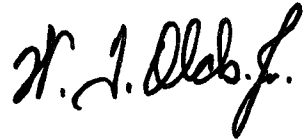
7. Plant Inventory before Development (page 82, last paragraph). Before areas are cleared for any developments, such as campgrounds and public access points, plants on the sites should be inventoried. If inventoried plants are members of species listed as Endangered or Threatened, or species which are candidates for such listing, the plants must be noted and the communities in which they occur preserved. | 8

8. Endangered Species Act of 1973--terminology (page 91, item 5, second sentence). At this point, and possibly others in the text, the terms "rare" and "endangered" should read "threatened" and "endangered" to conform with the terminology of the Act. | 9

9. Removal or Burning of Bankside Vegetation. The suggested wording of report comment No. 8 should be revised slightly to read as follows: "Removal or burning of bankside vegetation would be allowed under strict control only if research indicates that such practices are necessary for wildlife management purposes or preservation of plant associations and are not detrimental to aquatic species or the water quality of the streams." | 10

This policy should also govern the choice of any wording in the EIS text on burning or removal of vegetation in the study area. (We noted no such wording in our review, but we may have overlooked some which occurs.) The effects of fire on certain plants of presently limited distribution should be fully considered. Species whose ranges have been depleted by past and present human influence could be severely and adversely affected by fire or other means of vegetation removal prior to reestablishment--at least in part--of their former ranges.

We appreciate the opportunity to comment on the Rio Grande Environmental Statement. If you should have any questions pertaining to comments on threatened/endangered species, please contact Mr. Gene Ruhr of our Office of Endangered Species (phone - 202/343/7814).



Enclosures:

Plants and Animals Listed as Endangered or Threatened or Candidates
for Listing and Which are Expected to Occur in the Rio Grande
River (Texas) Wild and Scenic River Study Area

Scientific Name	Common Name	Status	Habitat
<u>PLANTS</u>			
<u>Brickellia shineri</u>	Shiner's Brickellia	Candidate for listing. Recommended by Smithsonian report as Threatened. Has definite botanical significance.	
<u>Cirsium turneri</u>	Cliff thistle	Candidate for listing. Recommended as Threatened by Smithsonian report. Endemic of Brewster County.	Bluffs at 3,100 feet in Maravillas Canyon.
<u>Emorya suaveolens</u>		Possible candidate for listing...Monotypic.	Maravillas Canyon.
<u>Epithelantha bokei</u>	Boke's button cactus	Candidate for listing. Recommended by Smithsonian report as Threatened. Commercially exploited.	Type locality is at 2,700 feet in Boquillas Canyon.
<u>Galium correllii</u>	Cliff bedstraw	Candidate for listing. Recommended by Smithsonian report as Threatened. Has no known close relatives.	Type locality is Eagle Nest (Langtry) Canyon just below study area.

Scientific Name	Common Name	Status	Habitat
<u>Polygala maravillasensis</u>	Maravillas milkwort	Candidate for listing. Recommended by Smithsonian report as Endangered. Has only 3 or 4 known populations.	Type locality is a mountain top west of Maravillas Creek about 2 miles from mouth of Maravillas Canyon
<u>ANIMALS</u>			
<u>Campostoma ornatum</u>	Mexican stoneroller	Possible candidate for Threatened listing.	Known from Terlingua Creek above study area.
<u>Notropis chihuahua</u>	Chihuahua Shiner	Candidate for Threatened or Endangered listing.	Known from Tornilla and Terlingua Creeks in Big Bend National Park. May occur in other creeks in the study area.
<u>Notropis simus</u>	Bluntnose Shiner	Candidate for Threatened or Endangered listing.	Known from the River proper, probably does not get into tributaries. May be extinct.
<u>Gambusia gaigei</u>	Big Bend Mosquitofish	On U.S. List of Endangered Species.	Known only from springs and pools in Big Bend National Park.
<u>Cyprinodon eximius</u>	Concho River pupfish	Possible candidate for Threatened listing.	Known from Terlingua Creek above study area. May also occur in clear flowing streams in study area.
<u>Pseudemys scripta gaigeae</u>	Big Bend Turtle	Possible candidate for Threatened listing. Found only in Brewster and Presidio Counties.	Rio Grande River--Big Bend National Park eastward to Laredo; Mexico.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>	<u>Habitat</u>
<u>Falco peregrinus anatum</u>	American peregrine	Endangered. Several active aeries in the study area on both sides of the river.	Nests on high cliffs and crags.
<u>Canis lupus baileyi</u>	Mexican wolf	Candidate for listing as Endangered. Notice of Proposed Rulemaking has been published. Not definitely known from the area at the present time, but has occurred in northern Brewster County in recent years.	Wide ranging.

Recommended Revisions of Rio Grande EIS Text--Threatened/Endangered SpeciesPage 55--substitute for the third paragraph.

"Several plants in the area deserve special recognition because they are unique and/or rare. All are recommended for further study as possible candidates for the Endangered or Threatened Species Lists in the Smithsonian Institution's 'Report on Endangered and Threatened Plant Species of the United States' (1975), prepared as directed by Section 12 of the Endangered Species Act of 1973. Review of the report by the Fish and Wildlife Service suggests that five named species are likely candidates for the list:

"(1) Shiner's brickellia (Brickellia shineri) is a rare species of Brewster and Val Verde counties, Texas, and Chihuahua, Coahuila, and Nuevo Leon, Mexico. It is a transitional species linking the genera Brickellia and Eupatorium and, therefore, of definite botanical significance.

"(2) Cliff Thistle (Cirsium turneri) is a rare endemic of Brewster (and perhaps Terrell) County, Texas, known from bluffs at 3,100 feet in the Maravillas Canyon.

"(3) Boke's button cactus (Epithelantha bokei) is a commercially exploited species known from Brewster County and adjacent Mexico. The type locale is hills near Boquillas Canyon at 2,700 feet in Big Bend National Park. It has also been found near Lajitas, west of the study area.

"(4) The cliff bedstraw (Galium correllii) is a rare species of which the type locale is Eagle Nest (Langtry) Canyon, east edge of Langtry, Val Verde County, Texas. Thus, it may be within the study area. It is also rare in northern Coahuila, Mexico.

"(5) Polygala maravillasensis, the Maravillas milkwort, is a rare species of which the type locale is a mountain summit west of Maravillas Creek, about two miles from the mouth of Maravillas Canyon, Brewster County, Texas. A few plants are known from Coahuila, Mexico. An expert on this section of the genus Polygala knows of only three or four populations in existence.

"Emorya suaveolens will require further study to determine if it qualifies as Endangered or Threatened. It is of a monotypic genus in Maravillas Canyon near the Rio Grande, Brewster County. It is known also from Coahuila and Nuevo Leon, Mexico, where it is less rare. The species is of botanical significance in examining links to the genus Buddleja (which is sometimes placed in its own family)."

Page 56, first full paragraph.

"Signs of raccoon, bobcat, coyote, ringtail, gray fox, and striped skunk are commonly observed. The mountain lion (Felis concolor stanleyana) and Mexican wolf (Canis lupus baileyi) are rare in this area primarily because much of the land adjacent to the river is sheep country and man's utilization of this region is contradictory to the welfare of these predators. In spite of this conflict, the area is one of the few places the mountain lion may be found in Texas and the wolf may occur in southwestern United States. The welfare of both species should be considered in all planning activities for the river. The Mexican wolf is now a candidate for the Endangered species list. Although the wolf is not definitely known to occur in the study area at the present time, it has been found in northern Brewster County in recent years. Beaver are abundant. . . ."

Page 57, beginning in first paragraph, 10th line, eighth sentence, to end of page.

". . . seen soaring along the cliffs. A few of the last remaining American peregrine falcons (Falco peregrinus anatum) breeding in Texas frequent the cliffs along this section of the river. The American peregrine falcon is listed as endangered by the Secretary of the Interior in accordance with the Endangered Species Act of 1973. Any active aeries along the river will almost surely qualify as critical habitat under section 7 of the Act. This endangered species feeds almost exclusively upon the abundant bird life.

"The endemic Big Bend mosquitofish (Gambusia gaigei) is found in an isolated pond adjacent to the flood plain near Rio Grande Village in Big Bend National Park. This fish is officially listed as Endangered.

"Two fishes are definite candidates for the Endangered or Threatened list. The Chihuahua shiner (Notropis chihuahua) is known in the United States only in the Park, and occurs in the lower reaches of Tornillo and Terlingua creeks. The bluntnose shiner (Notropis simus) may be extinct. If it still occurs, it will be found in the Rio Grande itself.

"Three possible candidates for the Threatened list are found in the study area. The Mexican stoneroller (Campostoma ornatum) is a fish found in Alamito Creek, Presidio County, Texas, and in Terlingua and Tornillo Creeks within the park. The Concho River pupfish (Cyprinodon eximius) is known from Terlingua Creek above the study area but may occur in clear-flowing streams within the study area. Lastly, the Big Bend turtle (Pseudemys scripta gaigeae) is found from Big Bend National Park eastward approximately to Laredo and south of the Rio Grande in several waterways of Mexico."

(The first two lines on page 58, which complete the original sentence begun at bottom of page 57, should be stricken.)

Page 84, beginning with first sentence, second line.

"Since nesting peregrines are easily disturbed by human activity, increased recreational use of the riverway during critical periods in the nesting cycle may have an adverse impact on this endangered species. The management program developed for the riverway must provide special protection of active aeries, such as restrictions on human activity within sight of occupied aeries."

RESPONSE TO COMMENTS BY
U.S. FISH AND WILDLIFE SERVICE

1. Section III. Impact on Fish and Wildlife now includes a discussion of the potential conflict between wildlife management and recreational use of the river and possible impacts.
2. Report comment No. 4
 4. Water Quality Criteria (e.g., pages 5, 14,26). The publication on water quality criteria (the so-called "Green Book") cited on these pages is now obsolescent, according to informal advice from the Environmental Protection Agency. In 1972, the National Academy of Sciences prepared under contract a research report entitled "Water Quality Criteria 1972" for EPA. This report, which has no official standing, is a first step--a basic data reference--toward revision of the Green Book. EPA is preparing a two-volume document, entitled "Criteria for Water Quality," now in draft form, which will become the official reference on water criteria. This reference is tentatively scheduled for publication in late summer 1975.

The 1970 "Guidelines for Evaluating Wild, Scenic and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System" requires that proposed rivers meet the "Aesthetics-General Criteria" contained in the Green Book. EPA approved Texas water quality standards meet or exceed these criteria for the study segment. Therefore, the references to "Aesthetics-General Criteria" have been deleted.

3. Report comment No. 12

12. Chemical Pesticides. The use of chemical pesticides within the study area or within watersheds affecting the river corridor should be addressed briefly in the report along the following lines.

If no data on use of chemical pesticides were found, a brief comment to that effect would be appropriate. If data were found, a summary of known facts and views about past and/or planned future use of chemical pesticides, including an assessment of effects on study area waters, lands, vegetation and fish and wildlife, and on the wild and scenic river proposal, should be included.

With regard to the use of pesticides in the river area, if included in the national system, the test should state:

The application of pesticides within or affecting the river corridor, including applications on forest, pasture, and cropland adjacent to the corridor, should comply with the Federal Environmental Pesticide Control Act of 1972 (P.L. 92-516). Consideration should be given to banning, in the above-named areas, the use of all pesticides classified as "restricted" under the act. Aerial spraying of any pesticide should be minimized, restricted to allow adequate buffer zones, or prohibited.

Pesticide data are not available. If the river is included in the National System, future pesticide use in the resource management area would be determined by the National Park Service. The suggested change in the text is beyond the scope of the proposal and the EIS and has not been incorporated.

4. Report Comment No. 11

11. Flora and Fauna (pages 33 through 37). Common names should be referenced and conform to those in a standard source, such as "Texas Plants - a Checklist and Ecological Summary" by F. W. Couler or "Manual of the Vascular Plants of Texas" by D. S. Correll and M. C. Johnston.

A number of misspellings occur in the common names of plants.

Information for this section was provided by the University of Texas Rare Plant Study Center. M. C. Johnston is Director of the Center. Misspellings have been corrected.

5. The suggested tabulation is included in the Appendix.
6. These points are addressed in Section I, Administration-Management, in Section III, Impact on Fish and Wildlife and in Section IV. Mitigating Measures Included in the Proposed Action.
7. The suggested revisions have been made in the final EIS.
8. These measures are provided for in Section IV, Mitigating Measures Included in the Proposed Action. Section I, Administration-Management, requires a detailed inventory.
9. The terminology has been corrected.
10. Removal of vegetation would occur only at proposed development sites which will be located during management planning for the area. Management planning will include means for enhancement of wildlife habitat.

JUN 09 1975



United States Department of the Interior

NATIONAL PARK SERVICE

SOUTHWEST REGION

P.O. Box 728

Santa Fe, New Mexico 87501

Handwritten: 12/6/9
226

IN REPLY REFER TO:

L7619

JUN 5 1975

Memorandum

To: Regional Director, South Central Region, Bureau of Outdoor Recreation, Albuquerque, New Mexico

From: Regional Director, Southwest Region

Subject: Review of Bureau of Outdoor Recreation draft environmental statement - Rio Grande Wild and Scenic River (DES-75/29)
Due June 6, 1975

COMMENTS ON THE ENVIRONMENTAL STATEMENT

Page 9, Second paragraph

A detailed archeological and historical survey "made within two years after riverway establishment" does not mesh program-wise with information in the final paragraph on page 7 wherein it is indicated a "management plan will be prepared by the National Park Service within two years after the Rio Grande has been included in the National System." Such surveys must be programmed and completed well in advance of management plans. Compliance with laws and Executive Orders will also be facilitated if a cultural resource inventory is available before planning begins.

It should be made clear that any proposed public use facilities would be located on lands acquired in fee.

Page 22, First paragraph: Line 2.

The species name for the candelilla plant should be Euphorbia rather than Euphoria.

Line 9.

The "circumstances which often lead to smuggling" needs clarification.

Page 61, first paragraph, third sentence:

We suggest changing this sentence to read as follows: This land is administered by the National Park Service through agreement with the International Boundary and Water Commission in conjunction with Amistad Recreation Area and is principally contained within steep canyon walls.



Page 69, last paragraph, line 1

The number of acres recommended for wilderness within Big Bend is 533,900 not 333,900.

| 6

Page 77, Section III

The draft statement is silent on impacts on law enforcement and Border Patrol activities.

| 7

Page 77, Impact on Recreation

Can the assertion "Hunting activity will remain essentially unchanged" be supported assuming a high probability of increased other public recreational uses of the riverway and surrounding lands?

| 8

Page 80, first paragraph

Perhaps land acquisition and scenic easement impacts should not be minimized. For example, owners' use of land for other purposes will be foregone.

| 9

Page 80, last paragraph

It might be well to recognize the need for resource carrying capacity studies to prevent river-use problems such as have and are being experienced at Grand Canyon.

| 10



RESPONSE TO COMMENTS BY
NATIONAL PARK SERVICE

1. The sentence on page 9 has been changed to read:

"A detailed inventory of historical archeological, geological, biological, and other similar areas will be made, and a program developed for their protection and interpretation within two years of riverway establishment."

The change should clarify the point that inventory and survey precede programming and planning.
2. Section I, Administration-Management, discusses fee acquisition and scenic easements with less-than-fee control. Property rights will be acquired to accommodate recreation use and support services. A sentence has been added to indicate that development will not be located on lands with less-than-fee control.
3. "Euphoria" has been changed to "Euphorbia."
4. Smuggling occurs when the Mexican quota system is filled. The narrative has been revised to clarify this occurrence.
5. The suggested change has been made in Section II, Land Ownership.
6. The figure has been corrected.
7. Impacts on law enforcement and Border Patrol are not known. Presently, Border Patrol activities are primarily air surveillance along the Rio Grande. The proposal will not interfere with or impact upon air patrols. Improved access on the U.S. side of the river could make illegal border crossings easier. Increased use of the river could either encourage or discourage such crossings. The possible need for additional customs stations will be examined during master planning the area.
8. Water-based activities - particularly floating and fishing - will increase much more than hunting as a result of river designation. Hunting in the area is not water-based and therefore, will not be influenced significantly by the national attention afforded the river.
9. The section on "Impact on Land Use" has been expanded and now identifies the uses which would be foregone.
10. The need for resource capacity evaluation is recognized in Section IV, Mitigating Measures Included in the Proposed Action. It is also recognized in Sections I and III.



INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO

200 IBWC BUILDING
4110 RIO BRAVO

EL PASO, TEXAS 79998

MAILING ADDRESS:
P. O. BOX 20003

OFFICE OF THE COMMISSIONER
UNITED STATES SECTION

JUL 15 1975

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
South Central Regional Office
Patío Plaza, 5000 Marble NE, Room 211
Albuquerque, New Mexico 87110

Dear Mr. Handley:

We are pleased to comment on the draft environmental statement on the Rio Grande Wild and Scenic River Study transmitted with your April 17, 1975 letter and on the revised language enclosed with your June 12, 1975 letter for a portion of pages 84 and 85 of the statement. Thank you also for providing us additional time to comment.

As we had previously agreed, Mexico's stated position was that it would participate in the Wild and Scenic River studies subject to: (1) prior agreements, such as the 1944 Water Treaty and the 1970 Boundary Treaty, must take precedence over any activity to be undertaken as part of the proposed study; (2) the reach of Rio Grande to be studied was to be limited to the reach between the Coahuila-Chihuahua State boundary and the Amistad Reservoir headwaters; and (3) the study was to be undertaken by the International Boundary and Water Commission, with the IBWC giving priority to maintaining the river as a boundary, stabilizing its course, benefitting from its waters, and to communication needs between the two countries.

Your draft environmental statement describes well on page 11 and on pages 36 through 39 the international treaties and possible future construction under these agreements. The reach of river proposed for designation is remote from population centers, and development of any new points of diversion for water from Rio Grande is not now known. For the reasons you describe on page 39, it is unlikely that any construction works would be undertaken under the 1970 Boundary Treaty in the study reach.

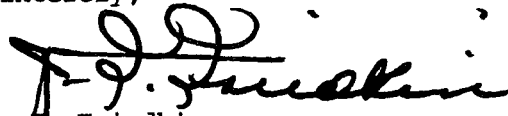
Your description on page 11 of the three reaches of Rio Grande listed in the 1944 Treaty for development of international reservoirs is correct. The studies by the two Governments preceding the selection of the Amistad site had included consideration of a total of 45 dam sites between Del Rio and a point 7 miles upstream from Lajitas, Texas. The Amistad site was

selected as it was strategically located below the confluence of the Pecos and Devils Rivers, the sources of the largest recorded floods on the Rio Grande. Although a third major storage reservoir is referred to in the Treaty, and extensive surveys were made for its location in the Big Bend section of the river, such a reservoir is not contemplated at this time.

The construction of a third dam or other works for utilization by either of the two countries of its waters in the river under the 1944 Treaty, or preservation of the river boundary under the 1970 Boundary Treaty, should be recognized as taking precedence over the Wild and Scenic River Act in any legislation to designate the Rio Grande as a component of the National system. This office, therefore, encloses the substitute language provided with your June 12, 1975 letter with some modification to reflect the above discussion.

We are in agreement with the draft statement with the substitution of the enclosed language for the last paragraph on page 84 and the top paragraph on page 85, the deletion of the last paragraph on page 107, and changing the last sentence on page 11 to read "Although a third major storage dam is possible under the 1944 Water Treaty, such a reservoir is not contemplated by the two Governments at this time."

Sincerely,



J. S. Friedkin
Commissioner

Enclosure:
Substitute Language

SUBSTITUTE LANGUAGE FOR PAGES 84-85,
DRAFT ENVIRONMENTAL STATEMENT

IMPACT ON WATER RESOURCE DEVELOPMENT AND
PRESERVATION OF THE RIVER BOUNDARY

The potential water resource and river control projects are those authorized by the 1944 Water Treaty and the 1970 Boundary Treaty. The 1944 Treaty provides that a storage dam may be constructed between Santa Elena Canyon and the Pecos River; however, the IBWC does not presently have any plans for major storage works in this reach of the river. The 1944 Treaty further states that either government may divert and use its allotted water and may construct the necessary works for such diversion between Fort Quitman, Texas, and the Gulf of Mexico. For this purpose the United States and Mexico may under the Treaty construct such dams and other joint works required for diversion of the flows of the river. Also under the 1970 Boundary Treaty, the two countries may agree to channel works to preserve the river boundary and either country may install bank protection works to protect its lands.

Certain provisions of the 1944 Treaty and the 1970 Boundary Treaty are contrary to and supercede the objectives of this Wild and Scenic River proposal. Designation of the Rio Grande as a component of the National system must not affect the existing Treaties between the United States and Mexico relating to the Rio Grande.

RESPONSE TO COMMENTS BY
INTERNATIONAL BOUNDARY AND WATER COMMISSION

1. The suggested modifications have been made in Section III, "Impact on Water Resources Development and Water Use."



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION SIX
FORT WORTH, TEXAS 76102
819 Taylor Street

May 28, 1975

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Patio Plaza, 5000 Marble, N.E., Room 211
Albuquerque, New Mexico 87110

RECEIVED BOR-SCRO			MAY 30 1975
IN REPLY REFER TO a. Info		c. Surname	
06-00.8		b. Reply d. Remarks	
To:	For:	Date	
<input type="checkbox"/> Regl. Dir.			
<input type="checkbox"/> ARD-RWM			
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<input type="checkbox"/> Info. Ofcr.			
<input checked="" type="checkbox"/> Res. Std.	TW	6/2	
<input type="checkbox"/> Pl. Assist.			
<input type="checkbox"/> State Prog.			
<input type="checkbox"/> Fed. Assist.			
File: <i>Comments on Rio Grande EIS</i>			

Dear Mr. Handley:

Your draft environmental impact statement for inclusion of the Rio Grande in the National Wild and Scenic Rivers System has been referred to this office for review and comment. Consequently, we have coordinated the review of this statement with our Division office in Austin, Texas, and believe the proposal will not adversely affect highways in the area.

Sincerely yours,

for *Wayne D. Keel*
J. W. White
Regional Administrator

JH
6/10
JL

ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

June 10, 1975

OFFICE OF THE
REGIONAL ADMINISTRATOR

Mr. Rolland B. Handley
Regional Director
South Central Region
Bureau of Outdoor Recreation
5000 Marble N.E.
Albuquerque, New Mexico 87110

Dear Mr. Handley:

We have reviewed the Draft Environmental Impact Statement, Proposed Inclusion of the Rio Grande in the National Wild and Scenic Rivers System. The statement recommends that the United States' side of the Rio Grande River from mile 842.3 to mile 651.1 be included in the National Wild and Scenic River System under Section 2(a)(i) of Public Law 90-542. The National Park Service will administer the area and be responsible for developing a management plan for the river corridor. The management plan and detailed lateral boundaries will be filed with Congress not more than two years after the inclusion of the river in the National System. Also, implementation of the proposed action is recommended only if there are no conflicts or objections expressed by the Government of Mexico.

In general, the statement addresses many of the project associated impacts. However, we suggest that the following comments be considered in preparing the final statement:

1. We believe that additional information should be included in the final statement concerning future National Park Service (NPS) management plans for the Rio Grande River segment currently recommended for inclusion in the National Wild and Scenic Rivers System. In particular, the final statement should delimit the lateral boundaries of the project area and provide information on future recreation development plans that might be considered. The draft statement points out that a management plan containing detailed lateral boundaries will be prepared within two years following inclusion of the recommended river segment in the National System. We believe that the NPS should provide the information early in the planning stage in order to make a more definitive evaluation of the proposal's environmental effects. Also, since implementation of this action depends, in part, on the plans recommended by the Mexican Government for their side of the river, we

| 2

suggest that a brief discussion of these plans and the ultimate effect they could have on the U.S. proposal be included in the final statement. | 2

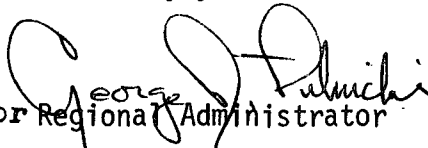
2. According to the draft statement, the water of the recommended stream segment is of high quality and is suitable for contact recreation, propagation of fish and wildlife and for use as a domestic raw water supply. Also, the Texas Water Quality Standards for the recommended stream segment are listed on page 33 of the draft. We would like to point out that these standards represent levels that are necessary to maintain the high water quality conditions in the project area. While these standards were based on existing conditions at the time of their publication, violation of them could result in degraded water quality in the area. Therefore, in order to substantiate that the water in the recommended river segment is of high quality, we suggest that a monitoring program be implemented during the NPS management planning stage. Monitoring should include, at a minimum, the parameters listed in the Texas Water Quality Standards for the recommended stream reaches. Particular emphasis should be placed on monitoring at industrial sites such as the Du Pont plant at LaLinda and the abandoned mercury mines on Terlingua Creek. Specific plans for the type of monitoring program to be implemented would probably necessitate a joint agreement by the U.S. and Mexican governments. The availability of this data would be of assistance in assessing the future water quality impacts that could occur during the implementation of future NPS management plans for the project area. | 3

These comments classify your Draft Environmental Impact Statement as LO-2. Specifically, we have no objections to the proposal as presented in the draft statement at this time. However, we are requesting additional information to be included in the final statement. The classification and the date of our comments will be published in the Federal Register in accordance with our responsibility to inform the public of our views on proposed Federal actions, under Section 309 of the Clean Air Act.

Definitions of the categories are provided on the attachment. Our procedure is to categorize our comments on both the environmental consequences of the proposed action and on the adequacy of the impact statement at the draft stage, whenever possible.

We appreciate the opportunity to review the Draft Environmental Impact Statement. Please send us two copies of the Final Environmental Impact Statement at the same time it is sent to the Council on Environmental Quality.

Sincerely yours,


for Regional Administrator

ENVIRONMENTAL IMPACT OF THE ACTION

IO - Lack of Objections

EPA has no objections to the proposed action as described in the draft impact statement; or suggests only minor changes in the proposed action.

ER - Environmental Reservations

EPA has reservations concerning the environmental effects of certain aspects of the proposed action. EPA believes that further study of suggested alternatives or modifications is required and has asked the originating Federal agency to re-assess these aspects.

EU - Environmentally Unsatisfactory

EPA believes that the proposed action is unsatisfactory because of its potentially harmful effect on the environment. Furthermore, the Agency believes that the potential safeguards which might be utilized may not adequately protect the environment from hazards arising from this action. The Agency recommends that alternatives to the action be analyzed fully (including the possibility of no action at all).

ADEQUACY OF THE IMPACT STATEMENT

Category 1 - Adequate

The draft impact statement adequately sets forth the environmental impact of the proposed project or action as well as alternatives reasonably available to the project or action.

Category 2 - Insufficient Information

EPA believes the draft impact statement does not contain sufficient information to assess fully the environmental impact of the proposed project or action. However, from the information submitted, the Agency is able to make a preliminary determination of the impact on the environment. EPA has requested that the originator provide the information that was not included in the draft statement.

Category 3 - Inadequate

EPA believes that the draft impact statement does not adequately assess the environmental impact of the proposed project or action, or that the statement inadequately analyzes reasonably available alternatives. The Agency has requested more information and analysis concerning the potential environmental hazards and has asked that substantial revisions be made to the impact statement. If a draft statement is assigned a Category 3, no rating will be made of the project or action, since a basis does not generally exist on which to make such a determination.

RESPONSE TO COMMENTS BY
ENVIRONMENTAL PROTECTION AGENCY

1. Section I, Administration - Management, provides for a detailed master plan including establishment of lateral boundaries to be prepared within 2 years of authorization. Section IV, Mitigating Measures Included in the Proposed Action, recognizes the need for surveys and inventories early in the detailed planning process. Also, an environmental assessment of the master plan and management program will be prepared prior to final adoption of plans. We believe the environmental statement adequately addresses the impacts associated with the concept plan for the proposed action which is inclusion of 191.2 miles of the Rio Grande in the National Wild and Scenic Rivers System.
2. Section I, Interrelationships with Other Projects and Jurisdictions, and Section III, Impact on Water Resources, discuss the Treaty agreements with the Government of Mexico which could possibly affect the river. A paragraph has been added to Section I, Interrelationships, concerning the relative isolation of the Mexican side and that no changes are anticipated.
3. The suggested monitoring program, which is recommended in the Study Report on the Rio Grande, is now included in Section IV, Mitigating Measures Included in the Proposed Action.



DGLPH BRISCOE
GOVERNOR

OFFICE OF THE GOVERNOR
DIVISION OF PLANNING COORDINATION

August 5, 1975

RECEIVED BOR-SCRO

To: *[Handwritten signature]*

[Handwritten initials] *[Handwritten date]*

JAMES M. ROSE
DIRECTOR

[Handwritten signature]

Secretary Kent Frizzell
United States Department of Interior
Office of the Secretary
Washington, D. C. 20240

Dear Secretary Frizzell:

The Study and the Draft Environmental Impact Statement (DEIS) on the Rio Grande National Wild and Scenic River Project has been reviewed concurrently by the Governor's Division of Planning Coordination and by interested State agencies pursuant to the Office of Management and Budget Circular A-95 and the National Environmental Policy Act of 1969.

The review participants submitted the following comments which warrant your consideration:

1. The Texas Water Rights Commission (TWRC) noted that the State is statutorily responsible for considering water rights impacts in a much larger area of the Rio Grande Basin than the area that is covered in this document. The TWRC also stated that the EIS should include a detailed discussion of the implications of the Wild and Scenic Rivers Act of 1968 on State water rights. The TWRC requested that the document include a statement of assurance that the State's jurisdiction over its waters and its processes and programs for water rights adjudication, appropriation and permitting will not be vitiated by future implementation and determinations pursuant to the above referred Act. 1
2. The Texas Parks and Wildlife Department (TP&WD) noted that their department had actively participated in the development of the preliminary draft of the study report as well as this EIS. The TP&WD noted that both the report and the EIS appear to be technically correct and each contains feasible recommendations; however, the TP&WD expressed their concern that future construction along the river may ultimately require a downgrading of the proposed "Wild and Scenic River" classification. 2
3. The General Land Office (GLO) supported the objective of preserving the area for future generations and expressed a desire to cooperate in accomplishing the goals of the proposed program. 3

However, the GLO stated that they must maintain their constitutional responsibility to produce revenue for the State Permanent School Fund from the extensive State owned land which would be affected by this proposal.

4. The Texas Water Quality Board (TWQB) commented favorably and noted that stream standards established by their agency had been incorporated into the draft statement. The TWQB also noted that the impact on water quality would be minor.
5. The Texas Water Development Board (TWDB) stressed the desirability of promoting a similar park facility on the Mexican side of the river to provide for consistent management and to avoid conflicts should activity on the Mexican side be inconsistent with the objectives of the proposal.
6. The Texas Historical Commission (THC) stated that the draft statement includes adequate procedures to protect and preserve cultural resources within the area.
7. The University of Texas Rare Plant Study Center (RPSC) noted that the draft statement contains data provided by their center. They commented that because the current data base is so limited, a more thorough biological survey should be made, particularly in the area downstream from Boquillas. The RPSC stressed the need to provide a wild and scenic rivers system that will provide for biological studies and prevent the extinction of threatened and endangered species.
8. The West Texas Council of Governments (WTCOG) commented favorably on the proposal but noted that consideration should be given to acquiring all affected land rather than obtaining scenic easements. The WTCOG also expressed a desire to review the detailed master plan when developed, and noted that their favorable comment on this EIS did not imply endorsement of the total project.

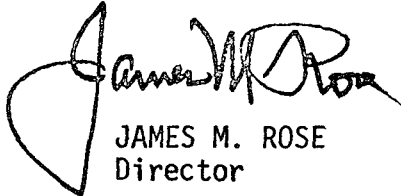
The Bureau of Economic Geology also participated in this review. The comments of the review participants are enclosed to assist you in your planning effort.

The Division of Planning Coordination concurs in the broad objectives of preserving valuable scenic areas of the State. It should be recognized, however, that the State is statutorily responsible for the administration of its resources. Firm assurances must be provided to insure that these responsibilities are not impinged upon by future implementation and determination under Public Law 90-542. In considering the inclusion of the pro-

posed area in the National Wild and Scenic River System, there is need to correlate this plan with the water and land area implications of the international boundary. The EIS would be enhanced by including a more complete explanation of the interrelationship of this proposal with possible future water resource projects under the provisions of the 1944 Water Treaty with Mexico. As a minimum, it is essential that the EIS include a more complete analysis of the implications of Public Law 90-542 on Texas water rights.

We appreciate the opportunity to review the Study and the Draft Environmental Impact Statement. If we can be of further assistance, please let us know.

Sincerely,



JAMES M. ROSE
Director

JMR/bss

Enclosures

cc: ✓ Mr. Rolland B. Handley, U. S. Department of Interior
Mr. Joe D. Carter, TWRC
Mr. Clayton T. Garrison, TP&WD
Hon. Bob Armstrong, GLO
Mr. Hugh C. Yantis, TWQB
Mr. Harry Burleigh, TWDB
Mr. Truett Latimer, THC
Dr. Keith Arnold, U.T.
Mr. E. Ray Hill, West Texas Council of Governments

TEXAS WATER RIGHTS COMMISSION

STEPHEN F. AUSTIN STATE OFFICE BUILDING

COMMISSIONERS

JOE D. CARTER, CHAIRMAN
475-2453

DORSEY B. HARDEMAN
475-4325

BURKE HOLMAN
475-2451

May 27, 1975

AUDREY STRANDTMAN
SECRETARY
475-4514

Brigadier General James M. Rose
Director, Division of Planning Coordination
Office of the Governor
P. O. Box 12428, Capitol Station
Austin, Texas 78711

Attention: Mr. Wayne N. Brown

Re: U. S. Department of the Interior,
Bureau of Outdoor Recreation,
Draft Environmental Statement on
Proposed Inclusion of the Rio
Grande in the National Wild and
Scenic Rivers System, April 16,
1975.

Dear General Rose:

In response to your request in letter of May 5 the Commission staff has reviewed the referenced draft environmental statement relative to a proposed, estimated \$2.4 million Federal project involving the inclusion of 191.2 miles of the Rio Grande, from River Mile 842.3 to 651.1, and about 9,600 acres of adjacent land, in the National Wild and Scenic Rivers System. Attached for your information and use is a copy of the Commission's Staff Analysis Report.

In essence, the staff finds that the referenced document would be enhanced if:

1. More emphatic recognition were given to the fact that insofar as water rights impacts are concerned, the State of Texas is statutorily responsible to consider an area of the Rio Grande basin much larger than that encompassed by the proposed 191.2-mile river segment project. The emphasis given in the referenced document to existing rights in the 191.2-mile segment is too restrictive and exclusionary.

General James M. Rose
May 27, 1975
Page 2

2. A more detailed discussion were included of the complex implications of the Wild and Scenic Rivers Act of 1968 (P. L. 90-542) on State water rights. Firmer assurances should be given in the document that the State's jurisdiction over its waters and that the State's processes and programs of water rights adjudication, appropriation, and permitting will not be vitiated by future implementation and determinations pursuant to P. L. 90-542.

The document fulfills reasonably the analytic and administrative requirements of the National Environmental Policy Act of 1969.

This review is made with the constructive intent of enhancing the referenced document, and to ensure a firm understanding regarding the statutory responsibilities of the Texas Water Rights Commission. If you have any questions on the attached report notify Dr. Alfred J. D'Arezzo of the Commission staff, 512-475-2678.

Sincerely yours,



Joe D. Carter

JDC-AJD:11

Attachment
As stated.

May 23, 1975

TEXAS WATER RIGHTS COMMISSION
STAFF ANALYSIS REPORT
ON
UNITED STATES DEPARTMENT OF THE INTERIOR
AND
BUREAU OF OUTDOOR RECREATION
(SOUTH CENTRAL REGIONAL OFFICE)
DRAFT ENVIRONMENTAL STATEMENT
ON
PROPOSED INCLUSION OF THE RIO GRANDE IN THE
NATIONAL WILD AND SCENIC RIVERS SYSTEMS
APRIL 16, 1975.

1. BASIS FOR REVIEW

- a. Letter of April 17, 1975, from the United States Department of the Interior, Bureau of Outdoor Recreation's Regional Director, Albuquerque, N. M., to the Director, Division of Planning Coordination, Office of the Governor of Texas. This letter transmitted and requested comments on the Draft Environmental Statement (DES) on a proposal to consider a 191.2-mile segment of the Rio Grande as part of the National Wild and Scenic Rivers System, pursuant to Section 5(a)(20), the Wild and Scenic Rivers Act of 1968, P. L. 90-542, 82 Stat. 906 (October 2, 1968). The DES was prepared by the South Central Regional Office, Bureau of Outdoor Recreation, pursuant to the National Environmental Policy Act of 1969, P. L. 91-190. Comments were requested within 45 days of the date of the letter.
- b. Letter of May 5, 1975, from the Chief, Intergovernmental Relations, Division of Planning Coordination, Office of the Governor of Texas to member agencies of the Interagency Council on Natural Resources and the Environment (ICNRE). This letter transmitted

the captioned, draft document for review pursuant to the provisions of Office of Management and Budget Circular No. A-95. Review comments were requested by May 21, 1975. However, on May 22, 1975, the Commission staff informed the Division of Planning Coordination that due to complexities encountered in analyzing the document, an extension of 15 days was necessary. The request was granted.

2. COMMENTS

a. Analysis of Water Rights Impacts.

The staff believes that a more careful and explicit analysis of the water rights impacts is essential. The vital implications of the Wild and Scenic Rivers Act of 1968, P. L. 90-542, 82 Stat. 906 (October 2, 1968) on water rights should be brought out clearly in the captioned document. Certain dubious impressions conveyed in the captioned environmental statement regarding State of Texas water rights impacts and commitments should be clarified.

Specifically, while the document recognizes the authority and responsibility of the Texas Water Rights Commission to administer a permit system governing the diversion and use of State waters (DES, p. 35); and while it mentions the Texas Water Rights Commission Order 1/ of February 22, 1971 (DES, p. 35) to investigate, pursuant to the State of Texas Water Rights Adjudication Act of 1967, the facts and conditions concerning claims of water rights from a much larger segment of the Rio Grande than that encompassed by the proposed P. L. 90-542 project, the staff is concerned about special emphasis given in the following statement on page 85, DES, to the matter of existing water rights in the project area seemingly excluding future rights and impacts beyond the project area:

"Designation of the Rio Grande as a wild and scenic river will not affect existing jurisdiction of the State over the water

1/ "AN ORDER of adjudication of claims of water rights from that segment of the Rio Grande and contributing Texas tributaries except the Pecos and Devils Rivers between Amistad Dam in Val Verde County, Texas, upstream to Fort Quitman in Hudspeth County, Texas. "

in the Rio Grande. The Texas Water Rights Commission has identified one permit and two water right claims in the recommended river reach: a permit owned by the National Park Service at Rio Grande Village, and two claims to water for irrigation at Stillwell Draw and approximately 20 miles west of Langtry, Texas. The two irrigation claims are presently under adjudication. The proposal will not affect existing water rights. "

Earlier, on pages 35 and 36, DES, after recognizing the fact of the issuance of the Texas Water Rights Commission Order of February 22, 1971, statement is made relative to the above-mentioned permit and claims that:

"Diversion of water within the river reach is minimal. . . . Because the proposed river reach is a legally navigable stream the State of Texas owns the bed of the Rio Grande to the center of the channel, except where transferred to the Federal Government. "

The specific causes for concern by the staff are as follows:

- (1) No mention is made of the Texas Water Rights Commission's Preliminary Determination dated May 13, 1974, relative to the adjudication of the Upper Rio Grande and contributing Texas tributaries, made pursuant to the Commission's Order of February 22, 1971. A careful examination of the said Preliminary Determination shows that insofar as water rights impacts are concerned, it is necessary to consider an area much larger than merely the 191.2-mile segment of the Rio Grande. Water rights both upstream and downstream of the proposed Wild and Scenic Rivers Act project area involved. Hence, the effect attained in the captioned document in focusing

merely on the permit and claims in the 191.2-mile reach is imprecise.

- (2) The staff is not convinced that the statements made in the captioned document emphasizing that the "existing jurisdiction of the State over the water in the Rio Grande," and that the "proposal will not affect existing water rights" are made on the basis of formal determinations of the language in P. L. 90-542. This particular aspect will be explained more fully in the next comment.

b. Analysis and Implications of the Wild and Scenic Rivers Act of 1968 on Water Rights.

Analysis of the Act by the staff indicates that once a river is included in the National Program, it must then be managed to preserve its natural environmental quality. The Act does three things to protect a river's natural environment. First, it protects both the water and the river's adjacent land area. Second, it creates a classification system for these areas, designed to limit incompatible development and use of the land, and to limit recreational use in a manner which will prevent the deterioration of the natural qualities of the river's area. Third, it sets out some management criteria for use within the framework of the classification system (i. e., wild river areas, scenic river areas, and recreational river areas).

The Act seeks to preserve the river's natural flow (see Section 2(b), P. L. 90-542).

Another important aspect of preserving the river is to insure that it isn't dried up through being overdrawn. Traditionally, the states have exercised control over irrigation of waters from rivers or streams within their boundaries, but, this power is subject to the overriding Federal navigation servitude and Federal reserved water rights.

It appears that the Act seeks to keep existing private water rights intact (Section 13(c), P. L. 90-542).

The Act says that states may continue to exercise jurisdiction over the river waters provided this does not conflict with the preservation program (Section 13(d), P. L. 90-542). The staff believes that these provisions (appears to have been borrowed from the Reclamation Act of 1902) direct that state allocated water rights are subordinate to the Federal program whenever the two conflict.

The Act does not establish minimal stream flows for the particular preservation program. Instead, Section 13(c), P. L. 90-542, ambiguously claims a quantity of water for the Scenic Rivers that is necessary to further the purposes of the Act. Each river is to be judged on its own merit. Apparently, no Federal agency could establish a general, uniform minimum quantity of stream flow for the river's protection. In this regard, attention is invited to the following extract from 113 Congressional Record, 21747:

"Enactment of the bill would reserve to the United States sufficient unappropriated water flowing through the Federal lands involved to accomplish the purpose of the Legislation. Specifically, only that amount of water will be reserved which is reasonably necessary for the preservation and protection of those features for which a particular river is designated in accordance with the bill. It follows that all unappropriated and unreserved waters would be available for appropriation and use under the State law for future development of the area." (Emphasis added.)

In summary, the staff is concerned that in spite of the provisos contained in Section 13 of P. L. 90-542, regarding the protection of the State's statutory prerogatives over State waters, the net result of implementing P. L. 90-542 may be to hamper the water

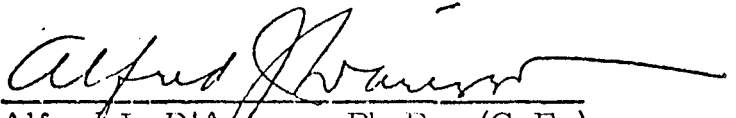
rights appropriation permit process after the given river is officially included into the National System of Wild and Scenic Rivers: If the assurances given in the captioned document are given on the basis of proper consideration of the complex provisions of P. L. 90-542, some of the concern will be dispelled.

c. Compliance with the National Environmental Policy Act of 1969.

The staff believes that the captioned document represents a reasonable effort to fulfill the analytic requirements of Section 102(2)(C) of the National Environmental Policy Act of 1969. However, the document would be enhanced by a fuller consideration of the water rights impacts, and the implications of P. L. 90-542 on water rights, discussed in 2 a and b, above. In addition, the document should include a more detailed analysis of the estimated project development costs. Ideally, descriptions of projects and actions of both the United States and Mexico should be included. Finally, the document would be enhanced by further consideration of secondary effects of the proposed project. In this regard, attention is invited to Section 1500.8(a)(3)(ii) of 40 CFR 1500; 38 FR 20550, August 1, 1973; effective January 28, 1974; amended by 38 FR 21265, August 7, 1973, relative to Council on Environmental Quality Guidelines on Preparation of Environmental Impact Statements:

"(ii) Secondary or indirect, as well as preliminary or direct, consequences for the environment should be included in the analysis. Many major Federal actions, . . . stimulate or induce secondary effects in the form of associated investments and changed patterns of social and economic activities. Each secondary effect, . . . through changes in natural conditions, may often be even more substantial than the primary effects of the original action itself. "

The foregoing comments are furnished with the constructive intent of assisting the planners concerned in developing a viable project which will be in the best overall interest of the Nation, the State, and the Region.


Alfred J. D'Apezzo, Ph.D., (C.E.)
Special Analyst for Environment
and Interagency Coordination

AJD:11

NOTED:



Joe D. Carter
Chairman

TEXAS
PARKS AND WILDLIFE DEPARTMENT



COMMISSIONERS

PEARCE JOHNSON
Chairman, Austin

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Vice-Chairman, Lubbock

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CLAYTON T. GARRISON
EXECUTIVE DIRECTOR

JOHN H. REAGAN BUILDING
AUSTIN, TEXAS 78701

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Beaumont

LOUIS H. STUMBERG
San Antonio

- June 3, 1975 -

Mr. Wayne N. Brown, Chief
Intergovernmental Relations
Office of the Governor
P. O. Box 12428, Capitol Station
Austin, Texas 78711

Dear Mr. Brown:

This Department has reviewed the draft environmental statement, Rio Grande Wild and Scenic Rivers System. We offer the following comments.

Throughout the course of this study, staff members of our Comprehensive Planning Branch, Parks Division, have maintained close coordination with the Bureau of Outdoor Recreation, and represented the Department on the Rio Grande Reconnaissance Study Team. Consequently, we have provided substantial input into the study report. The staff was afforded an opportunity to review the preliminary draft of the study report and draft environmental statement, both of which appeared to be technically correct and contained feasible recommendations.

Factors listed in the statement which would influence values that would enable segments of the River to be included in the Wild and Scenic River System appear to be logical and technically correct. We would be concerned, however, about a management policy which could allow an international bridge, powerline, pipeline or similar structure to cross the wild or scenic areas once they are so designated. The draft statement indicates that if such crossings are agreed upon by the United States and Mexico, crossings would be planned for "environmental compatibility" with the specific river areas.

Designation of a river segment as "wild" normally would preclude future development of such crossings (based upon the national criteria for evaluating river areas proposed for inclusion in the system). The allowance of such an occurrence normally would necessitate a reclassification of the wild segment to a lower category. This could also hold

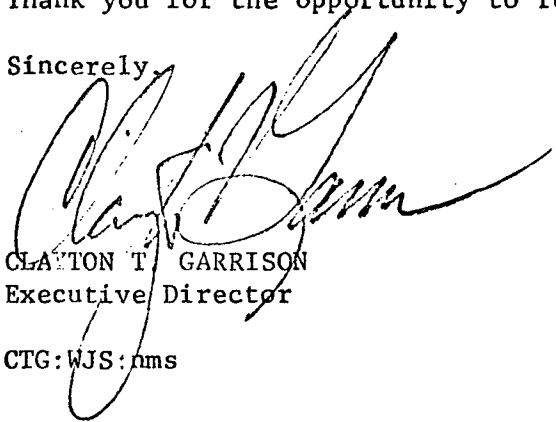
Page 2

Mr. Wayne N. Brown

true for river segments designated as "scenic" or "recreational," depending upon how the criteria are interpreted. Thus, the allowance of such crossings, once the river becomes a component of the system, appears not to be in keeping with the principal purpose of the System and Act, to protect and enhance the values which caused the river to be included in the System. Therefore, the proposed management policy, which might allow such crossings, could facilitate future conflict with the national criteria.

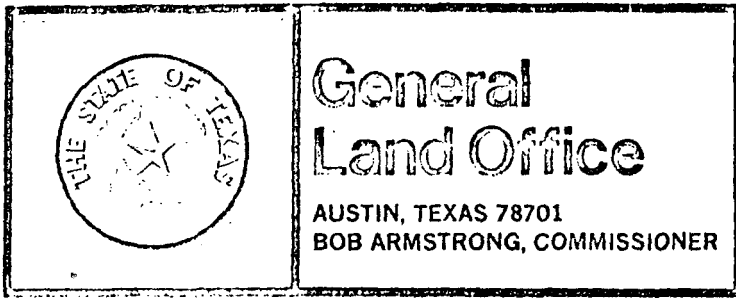
Thank you for the opportunity to review and comment on this document.

Sincerely,



CLAYTON T. GARRISON
Executive Director

CTG:WJS:nms



May 21, 1975

General James M. Rose, Director
Division of Planning Coordination
Office of the Governor
PO Box 12428, Capitol Station
Austin, Texas 78711

Attn: Mr. Wayne Brown

RE: Draft Environmental Statement:
Proposed Inclusion of the Rio
Grande in the National Wild
& Scenic Rivers System

Dear General Rose:

Our staff has completed review of the above-cited document and found it to be thorough and well prepared. The subject land resource is indeed a valuable asset to the State of Texas and we welcome well planned efforts to preserve it for future generations to enjoy.

As the study accurately reports there are some 3,245 acres of Public Free School Land and 1,375 acres of State-owned streambed administered by the General Land Office in the study area. With regard to these lands this agency desires to cooperate in accomplishing the goals of the proposed program. In doing so, however, we must maintain our constitutional responsibility to produce revenue from these lands for the Permanent School Fund.

We appreciate the opportunity to make comments on this proposal to include the Rio Grande in the National Wild and Scenic Rivers System. Thank you.

Sincerely,

Bob Armstrong
Bob Armstrong
Commissioner

BAka

TEXAS WATER QUALITY BOARD

J. E. PEAVY, MD

BEN RAMSEY

HUGH C. YANTIS, JR.
EXECUTIVE DIRECTOR

PH. (512) 475-2651



1700 NORTH CONGRESS AVE. 78701
P.O. BOX 13246 CAPITOL STATION 78711
AUSTIN, TEXAS

May 20, 1975

Re: Draft Environmental Statement,
Proposed Inclusion of Rio Grande
in National Wild and Scenic
Rivers System

General James M. Rose, Director
Division of Planning Coordination
Office of the Governor
P. O. Box 12428, Cap. Sta.
Austin, Texas 78711

Dear General Rose:

The staff of the Texas Water Quality Board has reviewed the draft environmental statement for the proposed inclusion of the Rio Grande in the National and Scenic Rivers System prepared by the South Central Region of the Bureau of Outdoor Recreation and finds that the draft statement adequately covers the water quality conditions within the proposed area. We have noted that the report has incorporated the stream standards established by this agency requiring the waters to be suitable for contact recreation, propagation of fish and wildlife, and domestic raw water supply. We have also noted that the anticipated overall impact on water quality is considered to be only minor, and that there will be only an estimated 7220 more river users by the tenth year after designation.

We appreciate the opportunity to review this proposed project. If we can be of further assistance, please let us know.

Sincerely,

Emory G. Long, Director
Administrative Operations Division

TEXAS WATER DEVELOPMENT BOARD

MEMBERS

JOHN H. MCCOY, CHAIRMAN
NEW BOSTON

ROBERT B. GILMORE, VICE CHAIRMAN
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CARL ILLIG
HOUSTON

A. L. BLACK
FRIONA

HARRY P. BURLEIGH
EXECUTIVE DIRECTOR



P.O. BOX 13087
CAPITOL STATION
AUSTIN, TEXAS 78711

May 28, 1975

AREA CODE 512
475-3571
1700 NORTH CONGRESS AVENUE

IN REPLY REFER TO:
TWDBP-0

General James M. Rose, Director
Division of Planning Coordination
Office of the Governor
P.O. Box 12428, Capitol Station
Austin, Texas 78711

Dear Jim:

Your memorandum dated May 5, 1975 transmitted for review and comments the Draft Environmental Statement "Proposed Inclusion of the Rio Grande in the National Wild and Scenic River System."

Following our staff-level review of this report, we offer no specific objections to its contents. We do foresee possible conflicts in the operation of this facility since the Mexican side of the river will not be managed as a park area. Reference is made to such activities as possible uncontrolled dumping of rubbish and unauthorized and improper use of facilities on the Mexican side. The inclusion of a similar park facility along the Mexico side of the river would be desirable.

The opportunity to make this review is appreciated.

Sincerely,

Lewis B. Seward
for
Harry P. Burleigh



Texas Historical Commission

Box 12276, Capitol Station

Austin, Texas 78711

Truett Latimer
Executive Director

May 20, 1975

Mr. Wayne N. Brown, Chief
Intergovernmental Relations
Office of the Governor
Division of Planning Coordination
P.O. Box 12428, Capitol Station
Austin, Texas 78711

Re: Draft Environmental Statement: Proposed Inclusion of the Rio Grande
in the National Wild and Scenic Rivers
System

Dear Mr. Brown:

In response to your request concerning the above-referenced proposal and Draft Environmental Statement, we have carefully examined the draft statement and believe that the implementation of the procedures designed to protect and preserve cultural resources within the area to be affected by the inclusion of the Rio Grande within the National Wild and Scenic Rivers system will prove adequate.

Thank you for the opportunity to provide comments on this D.E.S. If we may be of further service, please advise.

Sincerely,

Truett Latimer
State Historic Preservation Officer

By

A handwritten signature in black ink, appearing to read "Alton K. Briggs".

Alton K. Briggs
Archeologist

AKB:pc



THE UNIVERSITY OF TEXAS AT AUSTIN
RARE PLANT STUDY CENTER
P. O. Box 8495
AUSTIN, TEXAS 78712

May 8, 1975

Mr. Wayne N. Brown, Chief
Intergovernmental Relations
Division of Planning Coordination
Office of the Governor
Sam Houston State Office Bldg.
Austin, Texas

Dear Mr. Brown:

I have received and examined the Department of the Interior's Draft Environmental Statement "Proposed Inclusion of the Rio Grande in the National Wild and Scenic Rivers Program," dated Apr. 16, 1975. In response to your letter of May 5, 1975, the following comments are offered.

This environmental statement incorporates data which were supplied by members of the staff of the Rare Plant Study Center. The biological data-base for the report is limited for this wilderness area of such a low degree of accessibility, and we certainly recommend a more thorough biological survey of the area both under state and federal auspices, particularly the canyon areas downriver from Boquillas. Nevertheless, the present state of knowledge about the area is adequately and competently exposed in the statement, and the administrative alternatives are well covered. In those areas in which we have expertise, the statement is considered to be a worthy outcome of a commendable team effort.

As to the selection of policy alternatives, we feel that our goals of prevention of extinction and of biological studies of threatened and endangered species, would be best served by inclusion of segments within the national wild and scenic rivers system, with minimal or no state involvement. We base this first on the need for some action to try to prevent further biological deterioration in this area. Our rejection of the idea of state participation is based on the past history of state negligence and ineptitude in the field of protection of biological resources. It should be pointed out that even that agency (Parks and Wildlife) mandated by statute several years ago to establish policies and to set aside natural areas for the protection of threatened biological resources has done next to nothing in that direction. Our losses are on a daily basis and are irreplaceable. Because of this, we place greater faith in action at the federal level.

Thank you for this opportunity to comment.

160

Sincerely,


M.C. Johnston



WEST TEXAS
COUNCIL OF
GOVERNMENTS

100 NORTH MESA * EL PASO, TEXAS 79902

(915) 544-3827

E. RAY HILL
Executive Director

June 20, 1975

Mr. Rolland B. Handley
U. S. Department of the Interior
Bureau of Outdoor Recreation
South Central Regional Office
Patio Plaza, 5000 Marble N/E
Albuquerque, New Mexico 87110

Re: Rio Grande Wild and Scenic
River Proposal - Draft
Environmental Statement

Dear Mr. Handley:

In accordance with OMB Circular A-95, and the National Environmental Policy Act of 1969, the above-captioned proposal was reviewed by the Government Applications Review and Comment Committee (June 19, 1975), and by the West Texas Council of Governments Board of Directors (June 20, 1975).

After thorough consideration, favorable comment was recommended on the draft environmental statement with three reservations:

- (1) That consideration be given to the acquisition of all land affected in fee simple title rather than through scenic easements;
- (2) That the West Texas Council of Governments be given the opportunity to review the detailed master plan for the Wild and Scenic River Proposal when it is prepared; and,
- (3) That favorable comment on the environmental statement does not imply endorsement of the project itself.

Sincerely,

E. RAY HILL
Executive Director

ERH/bg

161

cc: Leon Willhite, Office of the Governor



THE UNIVERSITY OF TEXAS AT AUSTIN
BUREAU OF ECONOMIC GEOLOGY
AUSTIN, TEXAS 78712

University Station, Box X
Phone 512--471-1534

May 16, 1975

Mr. Wayne N. Brown, Chief
Division of Planning Coordination
P. O. Box 12428
Austin, Texas 78711

Dear Mr. Brown:

The staff of the Bureau of Economic Geology has reviewed the Draft Environmental Statement: Proposed inclusion of the Rio Grande in the National Wild and Scenic Rivers System.

We have no adverse comments concerning this proposal.

Thank you for the opportunity to respond.

Sincerely,

C. G. Groat
Acting Director

CGG:wll

RESPONSE TO COMMENTS BY
THE STATE OF TEXAS

Office of the Governor

1. Section II, Water Rights, now identifies that the Texas Water Rights Commission has responsibility for water outside the study segment and that adjudication of claims to water has been ordered for the Upper Rio Grande.
2. A discussion of the implications of the Wild and Scenic Rivers Act of 1968 on State water rights has been included in the section on "Impact on Water Resource Development and Water Use."

Based on the available water quality and flow data, we do not anticipate problems concerning the State's future jurisdiction over its waters. Present language, however, in the Wild and Scenic Rivers Act (Section 13 (c) and (d)) makes it impossible for us to include a statement which assures that the State's jurisdiction over its waters and its processes and programs for water rights adjudication, appropriation and permitting will not be vitiated by future implementation and determinations pursuant to the Act.

3. Additional international bridge, powerline, pipeline or other similar crossings would not be permitted except as provided in agreements with Mexico pursuant to treaties. If future international needs dictate such crossings, they would be planned for environmental compatibility with the objectives of river designation. Downgrading in classification would not necessarily occur under the present criteria and guidelines. Future construction on the U.S. side must be compatible with the river classification authorized by Congress and would be controlled through acquisition in land or rights in land.
4. Section I, Administration-Management, recognizes the need for biological and other surveys by the National Park Service. Section II, "Vegetation" and "Fish and Wildlife," has been expanded to include more discussion on threatened and endangered species of the area. A table reporting on the status of these species has been added to the appendix.
5. Revised language on the Treaties was provided by the International Boundary and Water Commission. It appears in Section III, "Impact on Water Resource Development and Water Use."
6. Refer to responses #1 and #2.

Texas Water Rights Commission

1. See response to Comment 1 of the Office of the Governor.
2. See response to Comment 2 of the Office of the Governor.

Texas Parks and Wildlife Department

1. See response to Comment 3 of the Office of the Governor.

University of Texas Rare Plant Center

1. See response to Comment 4 of the Office of the Governor.



The State of Texas
House of Representatives
Austin, Texas

SUSAN GURLEY McBEE
DISTRICT 70
P. O. Box 2910
Austin, Texas 78767
Phone (512) 475-2763

COMMITTEES:
Agriculture and Livestock
Calendars
Elections

May 29, 1975

Regional Director
Bureau of Outdoor Recreation
South Central Regional Office
5000 Marble NE
Albuquerque, New Mexico 87110

Dear Sir:

As Texas State Representative for District 70, which includes Brewster, Terrell, and Val Verde Counties, I read with great interest and concern your environmental statement on the proposal to include the Rio Grande in the National Wild and Scenic Rivers System.

As a result, I must express my reluctance to see the Rio Grande included in this program. After careful study of the draft, it appears to me that the only even remotely feasible recommendation is to exercise Alternative 4 on Option 1 only. Certainly 65 miles of river front is more than adequate on which to enact this project. The cost of implementation of Option 1 (\$25,000) is realistic, as compared to the astronomical price tag of \$2+ million of including other areas. I really don't see how one could possibly justify either Option 2 or the entire proposal when cost, difficulty in purchase, maintenance, and administration are taken into account. If the Government is intent upon including the Rio Grande in the Wild River Program--and its persistence in the face of continued opposition indicates that it is--then at least the project should be confined to land already federally owned, which offers more than enough area for successful application of the program.

I know of absolutely no support for the expanded project by any of my constituents in the three counties which would be

directly affected, and I must very strongly register my opposition to any option other than Option 1.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan G. McBe". The signature is written in a cursive, flowing style with a large, prominent initial "S".

SGM:jk

Copies to:

Senator L. M. Bentsen

Senator John G. Tower

Governor Dolph Briscoe

Congressman Bob Krueger

Senator W. E. Snelson

MIDDLE RIO GRANDE DEVELOPMENT COUNCIL

P. O. BOX 1461

DEL RIO, TEXAS 78840

May 21, 1975

Mr. Rolland B. Handley
Regional Director
U.S. Dept. of the Interior
Bureau of Outdoor Recreation
South Central Regional Office
Patio Plaza, 5000 Marble N.E., Room 211
Albuquerque, New Mexico 87110

Dear Mr. Handley:

As requested, I have reviewed the draft of the environmental statement on the Rio Grande Wild and Scenic River Study prepared by your Bureau in accordance with the National Environmental Policy Act of 1969. My comments are as follows:

First, the proposal area for the affected recommend river segment covering the proposal, as delimited on page 4 of the statement, ends downstream at the Terrel-Val Verde county line at River Mile 651.1. It may be that it should extend to the practical upper limit of the Amistad Reservoir. If the proposal area becomes a reality and is strictly controlled, people to whom the designated area is not available may use the excluded downstream portion. Thus, an area contiguous to the proposal area might be detrimentally affected environmentally.

Also, the establishment of the Rio Grande Wild and Scenic River Study area should perhaps have some additional controls other than those described in the environmental statement. Restriction of the number of users is one. This is related to the practical aspect of enforcement of the controls. The reason this is important, in my opinion, is that the establishment of a Rio Grande Wild and Scenic River area will inadvertently change the unique environment of the area it seeks to preserve. This is contrary to the reason for its establishment. The mere presence of people in relatively significant numbers unintentionally affects the ambiance of any physical setting. This would undoubtedly occur in the case in point.

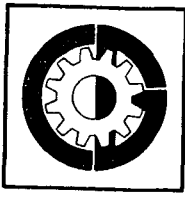
Sincerely,

Nema Lue Gause
Nema Lue Gause, AIP
Principal Planner

NLG/ga

RESPONSE TO COMMENTS BY
MIDDLE RIO GRANDE DEVELOPMENT COUNCIL

1. The practical upper limit (maximum water surface) of Amistad Reservoir extends to river mile 651.5 which is within the proposal area. The area and upper portion of Amistad Recreation Area would be subject to the same impacts attendant with increased visitor use described in Section III, "Environmental Impact of the Proposed Action."
2. These impacts are addressed in Section III, "Environmental Impact of the Proposed Action" and Section V, "Unavoidable Adverse Effects." Section I, "Administration and Management" states that "management will be directed at protecting the values which make the Rio Grande outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting."



WEST TEXAS
COUNCIL OF
GOVERNMENTS

1200 NORTH MESA EL PASO, TEXAS 79902

(915) 544-3827

Eric
Admivia
E. RAY HILL
Executive Director

June 20, 1975

Mr. Rolland B. Handley
U. S. Department of the Interior
Bureau of Outdoor Recreation
South Central Regional Office
Patio Plaza, 5000 Marble N/E
Albuquerque, New Mexico 87110

Re: Rio Grande Wild and Scenic
River Proposal - Draft
Environmental Statement

Dear Mr. Handley:

In accordance with OMB Circular A-95, and the National Environmental Policy Act of 1969, the above-captioned proposal was reviewed by the Government Applications Review and Comment Committee (June 19, 1975), and by the West Texas Council of Governments Board of Directors (June 20, 1975).

After thorough consideration, favorable comment was recommended on the draft environmental statement with three reservations:

- (1) That consideration be given to the acquisition of all land affected in fee simple title rather than through scenic easements; | 1
- (2) That the West Texas Council of Governments be given the opportunity to review the detailed master plan for the Wild and Scenic River Proposal when it is prepared; and, | 2
- (3) That favorable comment on the environmental statement does not imply endorsement of the project itself.

Sincerely,

E. RAY HILL
Executive Director

ERH/bg

cc: Leon Willhite, Office of the Governor

RESPONSE TO COMMENTS BY
WEST TEXAS COUNCIL OF GOVERNMENTS

1. Scenic easements were determined to be adequate for environmental control along most of the river corridor. Major exceptions would be access points and sites for camping, etc. which have been recommended for fee simple acquisition.

The canyon character of much of this stretch of the river together with current land uses (ranching, recreation) combine to make the existing environment generally compatible with a wild and scenic river. Hence the need for extensive fee simple acquisition is determined to be unnecessary. Exceptions would be access points and sites for camping etc. which have been recommended for fee simple acquisition.

2. The master plan will be subject to public review before it is adopted. The master plan is to be prepared with the assistance of all concerned agencies, which would include the West Texas COG.

AMERICANS BACKING BETTER PARK DEVELOPMENT

P. O. BOX 844

TEMPLE, TEXAS 76501

June 2, 1975

PRESIDENT
BOB BURLISON

DIRECTORS

HENRY SHAFER
ARCHAEOLOGY

DAVID RISKIND
BOTANY

FRANK DEGROOT
ZOOLOGY

PETER TOWNSEND
GEOLOGY

BILL RUSSELL
SPELEOLOGY

PAUL KOEPPE
ARCHITECTURE

MIKE BRADLEY
ROADS & TRAILS

VIA AIRMAIL

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Patio Plaza, 5000 Marble N.E., Room 211
Albuquerque, New Mexico 87110

RE: Your No. D4219 Rio Grande;
Proposed Inclusion of the Rio Grande in the National Wild
and Scenic Rivers System (Draft Environmental Statement)

Dear Mr. Handley:

Our Association has had an opportunity to review your Department's draft environmental statement for the above-captioned proposal. As you know, our Association is vitally interested in this project and to refresh your memory about our group, its goals and its position with respect to this project, I am attaching a copy of our letter addressed to you dated December 11, 1973.

The draft environmental statement accurately describes the area, its scenic and wilderness qualities, and has thoroughly considered the environmental impacts of the various proposed "Alternatives for Action." Your Department should be complimented for the excellent job and for taking the time and effort to really know the area prior to preparation of this environmental statement. The environmental statement clearly reflects the necessity of taking affirmative action on this project in order not to forever lose this unique wilderness area. I believe that your description of the impacts on Page 96 of the environmental statement concerning "no action" is very conservative to say the least. Many of our members run this portion of the Rio Grande annually and we are amazed at the road construction, fishing camp construction, etc. that takes place in this area each year. We are hopeful that the process of

JUN 04 1975

Mr. Rolland B. Handley
June 2, 1975
Page -2-

including this unique area into the National Wild and Scenic Rivers System can be expedited.

Thank you for providing us with an opportunity to comment upon your Department's draft environmental statement and we are looking forward to seeing the day when this magnificent area will indeed be protected.

Yours very truly,


Frank De Groot
Director

JUN 23 1975

3500 Sun Bowl, 24
El Paso, TX. 79902
June 17, 1975

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Patio Plaza 5000 Marble NE, Rm 211
Albuquerque, NM 87110

Dear Mr. Handley:

As a West Texan, I am writing in support of the BOR proposal for National Wild & Scenic River designation for the (Texas) Rio Grande.

I have spent a great deal of time in the area and have studied the draft EIS on the subject. I find no major problems with the draft EIS, except that -- if necessary -- I would go along with Bob Burleson's suggestion that the BOR eliminate the few miles below Sheftner Crossing due to fact that this portion of the proposal is receiving the most local opposition.

You might be interested in knowing that I more or less "filled-in" for the BOR at the June 12th meeting
[OVER]

of the WTCOG when my BOR representative appeared. George [WTCOG] Zapalac has informed me that BOR representatives will be at the June 18th meeting in Sierra Blanca Texas and also at a special 8:00 AM briefing on the 19th at the WTCOG building in El Paso. Having BOR people in West Texas to explain the proposal will be most helpful, and for this, I thank you.

You are probably aware that the Sierra Club, The Wilderness Society, the Guadalupe Wilderness Committee, and the New Mexico Wilderness Study Committee are all supporting the proposal.

Thank you for the opportunity to comment, and please let me know if I may be of further help.

Sincerely,
C. Wesley Leonard,
Chairman
Guadalupe Wilderness
Committee

RESPONSE TO COMMENTS BY
C. WESLEY LEONARD, GUADALUPE WILDERNESS

1. The Congressionally authorized study included the portion of the Rio Grande below Shafter Crossing to the Terrell-Val Verde County line. Because the segment was found to qualify, it was recommended for inclusion into the Wild and Scenic Rivers System. The public will be given another opportunity to comment on the proposal recommendations when the Congress considers legislation to designate the Rio Grande as a Wild and Scenic River.

(Note: Four individuals, whose letters are not printed, made the same comment as Mr. Leonard in regard to the deletion below Shafter Crossing because of local opposition.)

TEXAS COMMITTEE ON NATURAL RESOURCES

414 COCHRAN CHAPEL ROAD

DALLAS, TEXAS 75209

(214) 352-8370

May 30, 1975

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Patio Plaza, 5000 Marble NE, Room 211
Albuquerque, New Mexico 87110

Dear Mr. Handley:

Texas Committee on Natural Resources commends the findings and analysis in the Draft Environmental Statement on the Proposed Inclusion of the Rio Grande in the National Wild and Scenic Rivers System.

I have canoed and observed the proposed area, and strongly favor inclusion of the entire 191 miles.

We suggest that the Statement should include a reach-by-reach breakdown of significant environmental aspects. A careful breakdown would show that each reach has some valuable features which are found in no other reach. On the basis of such information, the ultimate decision-makers can avoid the unwise deletion of any reach from the Wild and Scenic River. | 1

This suggestion is particularly applicable to the reach downstream from Shafter's Crossing, which has been subjected to questioning by some people primarily for political reasons. This reach features geological and archaeological aspects which are not represented in the reaches further upstream. In addition, administration of this lower reach is important in protecting the rest of the proposed area from intrusion by excessive numbers of people and motorized equipment, with resultant pollution and depreciation of wilderness characteristics. The lower reach should also be administered to protect Amistad Reservoir from the harmful effects of junky development upstream. One of these effects is pollution. | 2 | 3

Sincerely yours,



Edward C. Fritz

ECF:edf

cc: Senator Lloyd Bentsen
Senator John Tower
Rep. Robert Krueger

176
BOARD OF GOVERNORS: Edward C. Fritz, Chairman; Mrs. Cleve Bachman, Jim Bowmar, E. W. Mudge, Jr. JUN 2 1975
CONTRIBUTING FELLOWS: Mrs. Glen Cornelius, Mrs. J. Claude Evans, Hazel C. Green, Ed Kutac, Mrs. William C. Miller, Mrs. Harold Volk, Mrs. Geth Osborn White
FELLOWS: Dr. W. Frank Blair, Mrs. Fagan Dickson, Howard Dodgen, Kay Evans, Dr. Frederick R. Gehlbach, Dr. Ira Gabrielson, Cass Germany, Mrs. J. W. Hershey, Mrs. Howard Kittel, Campbell Loughmiller, Micheaux Nash, Jr., Mrs. Stephen C. Thayer, Aylmer H. Thompson, Mrs. Larry White

RESPONSE TO COMMENTS BY
TEXAS COMMITTEE ON NATURAL RESOURCES

1. The Wild and Scenic Rivers Act and the Guidelines for evaluating wild and scenic river proposals define the criteria for river classification. "Scenic" and "Wild" are defined in the Glossary at the end of this section.
2. See response to Mr. Leonard's Comment 1.
3. See response to Middle Rio Grande Development Council's Comment 1.

Anne Wright
1582 Denison SW
Albuquerque, N.M.

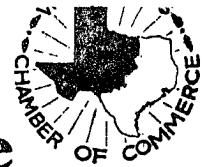
Mr. Rolland B. Handley, Regional Director July 8, 1975
Bureau of Outdoor Recreation
Patio Plaza, 5000 Marble NE, Rm. 211
Albuquerque, N.M.

Dear sir:

I am writing to you in support of the BOR proposal that 191 miles of the Rio Grande in Big Bend, Texas be added to the National Wild and Scenic Rivers System. Whitewater, sheer cliffs, lazy canyons, and a sense of remoteness are only a few of the wonders of nature that abound in this area, not to mention the wildlife including the endangered peregrine falcon (this is one of its major breeding areas) that live there.

I beg that you support this proposal, and I assure you that the New Mexico Wilderness Study Committee and the UNM Mountain Club appreciate your efforts. Thank-you.

Sincerely yours,
Anne Wright
UNM Mountain Club



West Texas Chamber of Commerce

ADMINISTRATIVE OFFICES: P. O. BOX 1561 • ABILENE, TEXAS 79604 • PHONE 915/677-4325

J. FIKE GODFREY
EXECUTIVE VICE-PRESIDENT

May 22, 1975

Mr. Rolland B. Handley, Regional Director
Bureau of Outdoor Recreation
500 Marble, NE
Room 211
Albuquerque, New Mexico 87102

Dear Mr. Handley:

RECEIVED BOR-SCRO	
MAY 29 1975	Info c. Surname Reply d. Par. no.
To:	For Initials
<input checked="" type="checkbox"/> Regl. Dir.	
<input checked="" type="checkbox"/> ARD-DVM	<i>Handley</i>
ARD-NSP	<i>Handley</i>
Adm. Offr.	
Info. Offr.	
<input checked="" type="checkbox"/> Rec. Offr.	<i>Handley</i>
Pl. Assnt.	
State Prog.	
Fed. Assnt.	
File:	<i>Handley</i>
Rio GRANDE Chamber of Commerce	

Thank you for the invitation requesting comments from the West Texas Chamber of Commerce on the draft environmental statement on the Rio Grande Wild and Scenic River Study prepared by the Bureau of Outdoor Recreation. The West Texas Chamber of Commerce represents a diversified cross section of interests from throughout West Texas and is, in fact, the nation's largest regional chamber of commerce. A map of our service area is attached.

The West Texas Chamber of Commerce, as the record will reflect, is deeply interested in the development of outdoor recreation resources and also in the protection of the natural resources located in the region it serves. In fact, the West Texas Chamber of Commerce took an important leadership role in the establishment of both National Parks located in West Texas and is taking a leadership role in the continued development of these and other areas with the objective of providing enjoyment for the majority of the people without undue adverse impact on what nature has provided.

The statement referred to above is of major concern to the West Texas Chamber of Commerce. It will have, if implemented in its present form, a far reaching and long lasting impact (eternal for all practical purposes) on West Texas. It will, if adopted, result in completely closing a major portion of the national border to any future development other than the very limited development directly associated with the Wild and Scenic River Designation.

A study has been made of the statement as received. We note that the Bureau is now requesting that a total of 191.2 miles of the Rio Grande be included. This amounts to a 33-mile or 20% increase over the December 1973 proposal which called for a 158-mile segment to be included. The following is a direct quote from that study: "The 158-mile segment of the Rio Grande from mile 842.3 to Shafter Crossing meets the criteria

May 22, 1975

for inclusion in the system. The remaining 33 miles of the study area, from Shafter Crossing to the headwaters of Amistad Reservoir, do not contain the outstanding qualities for inclusion." The question that arises is, have outstanding qualities suddenly developed since December 1973 or can studies be designed so that results will substantiate a pre-determined plan? | 2

In our first comment on the original proposal made January 9, 1974, we went on record as opposing the Wild River Designation (including scenic designation). The reasons stated for that opposition included (1) lack of widespread public knowledge of the hearings; (2) no agreement with Mexico; (3) discrimination against those who would like to enjoy the river by means other than river transportation.

In view of the present statement (DES 75-29), we wish to go on record as remaining in opposition to the proposal to designate the 192.2-mile segment as wild and scenic based on the reasons outlined above supplemented by the following:

- (4) In regard to the segment within Big Bend National Park, we do not at present see any need for a scenic designation since the main change would be only to place management and decisions within the framework of the Wild and Scenic River Act.
- (5) We question the availability of sufficient manpower to properly staff this additional area. It is our understanding that Big Bend Park is understaffed and has been for sometime.
- (6) It is our understanding that the majority of the landowners along the segments of the river involved are against the proposal. Until such time as we are convinced of the real need for the Wild and Scenic Designation we would be opposed to forced, involuntary transfer of private property to the Federal Government.

Based upon the above reasons, the West Texas Chamber of Commerce maintains its opposition to the proposals set forth in DES 75-29 and recommends that no action be taken at the present time and that river segments within Big Bend National Park and the Black Gap Wildlife Management Area continue to be managed under existing programs and authorities.

Sincerely,



JFG/ts
Attachment

Mr. Rolland B. Handley

- 3 -

May 22, 1975

cc: Senator John G. Tower
Senator Lloyd M. Bentsen
Congressman Omar Burleson
Congressman Robert C. Krueger
Congressman George Mahon
Congressman J. J. (Jake) Pickle
Congressman W. R. Poage
Congressman Jack Hightower
Congressman Olin E. Teague
Congressman Richard White
Congressman Jim Wright
Congressman Dale Milford
Congressman James M. Collins
Congressman Ray Roberts

RESPONSE TO COMMENTS BY
WEST TEXAS CHAMBER OF COMMERCE

1. Section VII, Irreversible and Irretrievable Commitments of Resources, recognizes that designation of the river into the National System can be reversed by Congress if it is in the national or international interest at some future time.
2. Prior to the public meetings, only an aerial survey of the river was made below Shafter Crossing. After receiving public input on the values of this river segment, the Study Reconnaissance Team conducted an on-the-ground and river float evaluation. Closer examination revealed that the 33 miles below Shafter Crossing did meet the criteria and qualified for inclusion in the National System under a "scenic" classification.

P. O. Box 157
Glenwood, New Mexico 88039
(505) 539-20745

May 27, 1975

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Patio Plaza 5000 Marble NE Room 211
Albuquerque, New Mexico 87110

Dear Mr. Handley

Thank you for this opportunity to comment on the draft environmental statement for the proposed inclusion of the Rio Grande (Texas) in the National Wild & Scenic Rivers System. The Wilderness Society is a national conservation organization with a primary interest in preserving wilderness and wild river areas. We have 96,000 members nationwide and several thousand in Texas.

The Wilderness Society supports the BCR plan to designate 191.2 miles of the Rio Grande in Texas as a component of the National Wild & Scenic Rivers System under the administration of the National Park Service. The draft environmental statement seems to adequately cover the environmental impacts of this action and possible alternatives.

I have floated this portion of the Rio Grande several times and find it to be one of the outstanding wilderness rivers of the nation and the outstanding wild area remaining in Texas. It is a nationally significant area without any doubt.

Consideration should be given to classifying portions of Segment A as 'wild' instead of 'scenic'.

Page 69 of the DEIS contains a mistake. The wilderness proposal for Big Bend National Park by the National Park Service is 533,900 acres.

I will look forward to receiving a copy of the final EIS. Please include this statement in the hearing record.

Sincerely


Dave Foreman

New Mexico/West Texas Field Consultant

RESPONSE TO COMMENTS BY
THE WILDERNESS SOCIETY

1. Because of the several access points and the campground development at Rio Grande Village, Segment A does not meet the criteria for classification as "Wild."
2. The acreage figure has been corrected.

JUN 09 1975

GEORGE L. PETTIT 1421 ARCHERY LANE • GARLAND • TEXAS 75040
214 / ~~BR 2 4833~~ 495 3273 3 JUN 75

JK
6/9
JK

BUREAU OF OUTDOOR RETREATION,
ALBUQUERQUE, N.M.

DEAR SIRs —

THE ENVIRONMENTAL IMPACT STUDY ON
THE LOWER CANYONS OF THE RIO GRANDE
IS A GOOD ONE. I WOULD LIKE TO
EMPHASIZE HERE THAT I THINK IT IM-
PERITIVE THAT WE GIVE WILD RIVER
STATUS TO THIS SECTION OF THE
RIVER BEING CONSIDERED. TEXAS IS
WOEFULLY LACKING IN WILD AREAS, AND
TO LET DEVELOPMENT TAKE PLACE THAT
WOULD RUIN THE WILDERNESS QUALITY
OF THE LOWER CANYONS WOULD BE
VERY SAD AND UNNECESSARY. PLEASE
ADD THIS LETTER TO THE SIDE FOR
PRESERVATION OF THE LOWER CANYONS
OF THE RIO GRANDE.

THANK YOU —

Geo. Pettit

RESPONSE TO COMMENTS BY
MR. GEORGE L. PETTIT

1. The proposal recommends that the 70 mile stretch between Reagan Canyon and Indian Creek be classified as "wild." This area contains the "Lower Canyons."

Howard Axson
2026 Melbourne Ave
Dallas Tx 75224

Bureau of Outdoor Recreation
Serra Mall N.E.
Albuquerque New Mexico 87801

Dear Sirs,

I have read with great interest and careful consideration, the proposal to include a 19.2 mile stretch of the Rio Grande into the Wild and Scenic Rivers Act. I have found this Draft EIS an excellent document with careful study and wise recommendations demonstrated throughout. I would hope that this draft would become the final EIS with one amendment. That is, not to increase access to the Rio Grande further than is now available. Also I would like to see more emphasis on more land acquisition above the 9500 acres minimum proposed. Once again, this document is ~~well~~ ^a well thought out study and I would hope it becomes the final EIS

with the recommendations I have included.

Sincerely,

Lowell Lanyon

Chairman Dallas Regional Group -
Lowell Star Chapter of the
Sierra Club.

RESPONSE TO COMMENTS BY
MR. HOWARD SAXON

1. Only three additional access points are proposed. These would allow river trips of various lengths and degrees of difficulty.
2. See response to Comment 1 of the West Texas Council of Governments.

2633 S. 41 Street
Abilene, Texas 79605
May 29, 1975

Bureau of Outdoor Recreation
5000 Marble St. NE
Albuquerque, New Mexico 87110

Dear Sirs:

I have read the initial (Draft) Environmental Impact Statement (DES 75-29) for the proposed inclusion of the Rio Grande River from river mile 842.3 to river mile 651.1 in the National Wild and Scenic Rivers System.

I give my whole-hearted support to including that portion of the Rio Grande in the Wild and Scenic Rivers System. My only questions after reading the DES are the following:

- 1) Why was the area from Colorado Canyon downstream to river mile 842.3 omitted from the proposal?
- 2) How did you determine which sections of the river were to be designated "wild" and which were to be designated "scenic"?

It might be helpful to clarify these two points in the final Impact Statement.

Sincerely,


Joan B. Schindler

RESPONSE TO COMMENTS BY
MS. JOAN B. SCHINDLER

1. The initial proposal for the study included that reach of the Rio Grande from Alamito Creek to the east boundary of Terrell County. After agreements with the Government of Mexico, the river segment from Alamito Creek downstream to River Mile 842.3 was excluded from the study proposal. Colorado Canyon lies within this reach.

The classifications are defined in the Wild and Scenic Rivers Act and the Guidelines for evaluating proposed river areas.

2. The determination of which segments would be designated "wild" and which "scenic" is based upon the presence or absence of man's influence. Specifically, the three segments designated "scenic" were so designated for the following reasons: (1) Segment A includes river access at six primitive fishing camps, two Mexican Villages, and recreation development at Rio Grande Village; (2) Segment C contains two areas of human impact, a fluorspar processing operation at La Linda, Mexico, and the bridge at Heath Crossing, Texas; In addition, several primitive fish camps in Black Gap Wildlife Management Area serve as access points; and (3) Segment E has evidence of concentrated livestock grazing and, in addition, several private access points and boating and fishing camps are found in this segment.

a. Info c. Surname
b. Reply d. Remarks

Box 61
Alpine, Texas 79830
May 6, 1975

Regl. Dir.	For	Initials	Date
ARD-RW/Mc	6	MM	7/9
ARD-HMR			
adm. Ofcr.			
Asst. Dir.			
Mr. Roland B. Handley			

Dear Mr. Handley:
Not a student
respond.

Mr. Roland B. Handley Regional Director
Bureau of Outdoor Recreation
South Central Office
Albuquerque, New Mexico 87110

Received your letter of April 7, 1975 along with a copy of the draft statement on the proposed inclusion of the Rio Grande in the Nat'l. Wild and Scenic River System. In your letter you solicit our comments on the adequacy of the draft statement.

To begin with: In the front of your statement page 1 of the summary, item 5, you list the departments, bureaus, committees etc. from whom you have requested comment. The U.S. Customs and the U.S. Immigration Service are not listed. It would appear that comments from both of these services would be of vital importance to the construction of this proposal. Officers of both services have expressed to us (and others) their great concern that the designation of this area as Wild and Scenic would present a veritable haven to criminals, illegal aliens, and fugitives - nationally and internationally.

Next, on page 1 item 1, you state that such action is recommended only if Mexico does not object and if the objectives of Mexico do not conflict with those of the U.S. Assuming that Mexico does not object nor have conflicting plans or in the event that Mexico has no plans at all (which is most probable), you will be proposing only a Wild and Scenic River. Surely you can foresee the unattractive potentialities of such a situation.

On page 7, you state that management will be directed at protection while at the same time provide public recreation. No way! You cannot preserve this area and turn in the public to recreate at the same time.

From page 15 thru 75, it is evident that your group did an outstanding job of accurately describing and reporting.

On pages 75 to 87-As to the future environment without the proposal and the subsequent impacts, we feel that you have exaggerated the dire predictions of the uncontrolled future. The landowners in the area appreciate what they have and will not allow it to be destroyed.

Page 92- The Unavoidable Adverse Environmental Aspects were obviously called to your attention by the no-action voters. Apparently your study group, in their meticulous study, failed to report on adversities. They also failed to report the Limiting Factors on page 72 which were also pointed out via the no-action voters. Could it be that the study group wore rose colored glasses? You have underplayed these limiting factors and adversities in your statement.

Pages 105-106. You described the meetings accurately enough and you did take our questions and comments into consideration (evidence pages 72 and 92) but you did not put the true light on the picture. The recipients of the statement will not know that the meeting in Alpine was called on very little advance notice locally. They will not know that a certain Dr. John Baker just happened to fly in from Dallas and take it upon himself to be the principal speaker in behalf of the natives. They will not know that in the first half of his well planned

(next page)

MAY 09 1975

speech, he attempted to identify with the landowners and plead their case, then in the second sang the praises of the proposal. The readers of the statement will not know that it was obvious that it had been pre-arranged for Dr. Baker to speak first in order to pour oil on the waters and pave the way for the information we were about to receive. In stating that only 36% of the 700 letters recommended no-action, you did not identify nor take into consideration the origin of the other 64%. You did not mention that some of the letters came from groups such as West Texas Chamber of Commerce (voting no-action) representing over three million people.

On page 99 under Comparison Summary you estimate acquisition and development costs. Perhaps the acquisition cost can be estimated but the development costs proposed are questionable. And what about Maintenance? With the economical crisis that faces this nation today, shouldn't the expense of this proposal be given some more detailed attention? The John and Jane Does of the future could very probably survive without this costly playtoy and suffer no consequences. 5

We believe that though your report is expertly constructed and most accurate (if not complete) in information, it does not offer anything so unique that cannot be found elsewhere in presently existing parks and rivers.

If you are going to send out information for comment, send ALL of the information and TELL IT LIKE IT IS.

Thank you for inviting us to comment. We will be glad to accommodate you in the future if we can be of further service.

Most sincerely yours,

Mr. & Mrs. J.W. Stone

Mr. and Mrs. J.W. Stone
Box 61
Alpine, Texas 79830

Copies of this letter will be sent to our congressmen. //

RESPONSE TO COMMENTS BY
MR. AND MRS. J.W. STONE

1. See response comment of the National Park Service. It should also be noted that river use of the Rio Grande and visits to Big Bend National Park will increase with or without the proposal. Under management as an entity by the NPS and increased use, it would seem that the "criminal haven" character of the river would be reduced, not enhanced.
2. The study was conducted on the U.S. side only and the proposed management recommendation apply to the U.S. side. A paragraph has been added to Section I, Interrelationships with other Projects and Jurisdictions, concerning the relative isolation of the Mexican side, absence of change anticipated, and the Government of Mexico's lack of objection to the proposed recommendation.
3. "Unavoidable Adverse Effects" associated with increased visitor use are discussed in Section V.
4. On November 20, 1973 advance copies of the first Bureau release were sent to Senators Tower and Bentsen, Representatives Fisher and White, Governor Briscoe, and the County Judges for Brewster, Terrell and Val-Verde Counties. On November 21, 1973, 197 of the subject releases were sent to major newspapers, radio and television stations across Texas as well as State agencies, organizations and individuals which had previously expressed interest in the study.

On November 28, 1973 the Texas Parks and Wildlife Department sent nearly 2,150 releases to all State agencies, all daily and weekly newspapers and nearly 1,500 radio and television stations.

On November 30, 1973 a second Bureau news release was sent to the same parties which received the first release. In addition, the release was sent to an expanded list of State agencies and members of the State Legislature. Nearly 250 releases were sent at that time.

On December 6, 1973 the Texas Parks and Wildlife Department sent an additional news release regarding the public information meetings. This mailing was similar to the previous Parks and Wildlife Department release.

5. Operation and maintenance costs are estimated to range from \$85,000 for the first year to approximately \$620,000 for the fifth year. Both acquisition and development costs will be refined and updated when the management plan is prepared.


#78 11048 Montana
El Paso, Texas 79935
30 May 1975

Mr. Rolland B. Handley
Regional Director
Bureau of Outdoor Recreation
Patio Plaza 5000 Marble NE Room 211
Albuquerque, New Mexico 87110

Dear Sir:

In regard to the recently released assessment for the proposal for wild & scenic designation for a 191 mile section of the Rio Grande I wish to express complete support for such action. As a resident of West Texas served by the recreational benefits of a wild river designation, I am very interested in seeing this river section preserved in its present natural state. As a biologist and founding general contributor of the Chihuahuan Desert Research Institute I am amply aware of the valuable wild-life habitat available in the area. I am also aware that a current professional study is being conducted to analyze visitor impact on riparian communities within this section and the conclusions forthcoming should definitely lend credibility to opposition to any further development along the river in this area. In consideration of economic interests, it should be obvious to those with a serious, responsible concern that the income and tourist attraction of private professional river trip services is of significant and non-consumptive value.

Cordially,


Marsha McKinnerney
Biology Dept.
El Paso Community College

6/16
17W
sub
P10

1110 Dairy Road
Garland, Texas 75040
June 9, 1975

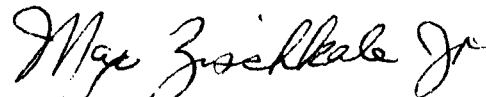
Bureau of Outdoor Recreation
5000 Marble Street, N.E.
Albuquerque, New Mexico 87110

Gentlemen:

It is my understanding that the Bureau of Outdoor Recreation has completed an Environmental Impact Statement on the Lower Canyons of the Rio Grande recommending that the canyons be given Wild and Scenic River status.

I wish to go on record supporting this statement. The Lower Canyons are one of the few remaining wilderness areas in Texas and are certainly one of the most spectacular river canyon systems in the country. Because of this fact, I think it is imperative that this area be preserved in its natural state for not only the current generation, but those to come. So many of our beautiful natural areas have already been totally destroyed or irrevocably altered that it behooves us to save the few that haven't so that those generations to come can see a bit of what this great land once was.

Sincerely,



Max Zischkale, Jr.

MZ:bcr

GLOSSARY

1. Fee simple title: Ownership of land with unrestricted rights of disposition.
2. Free-flowing: Existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.
3. Scenic easement: The right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the Wild and Scenic Rivers System, for the purpose of protecting the natural qualities of a designated wild, scenic, or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement.
4. Scenic river areas: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
5. Wild river areas: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
6. Carrying capacity: That level of use which a recreation resource can sustain without degradation of the values which caused it to be designated.

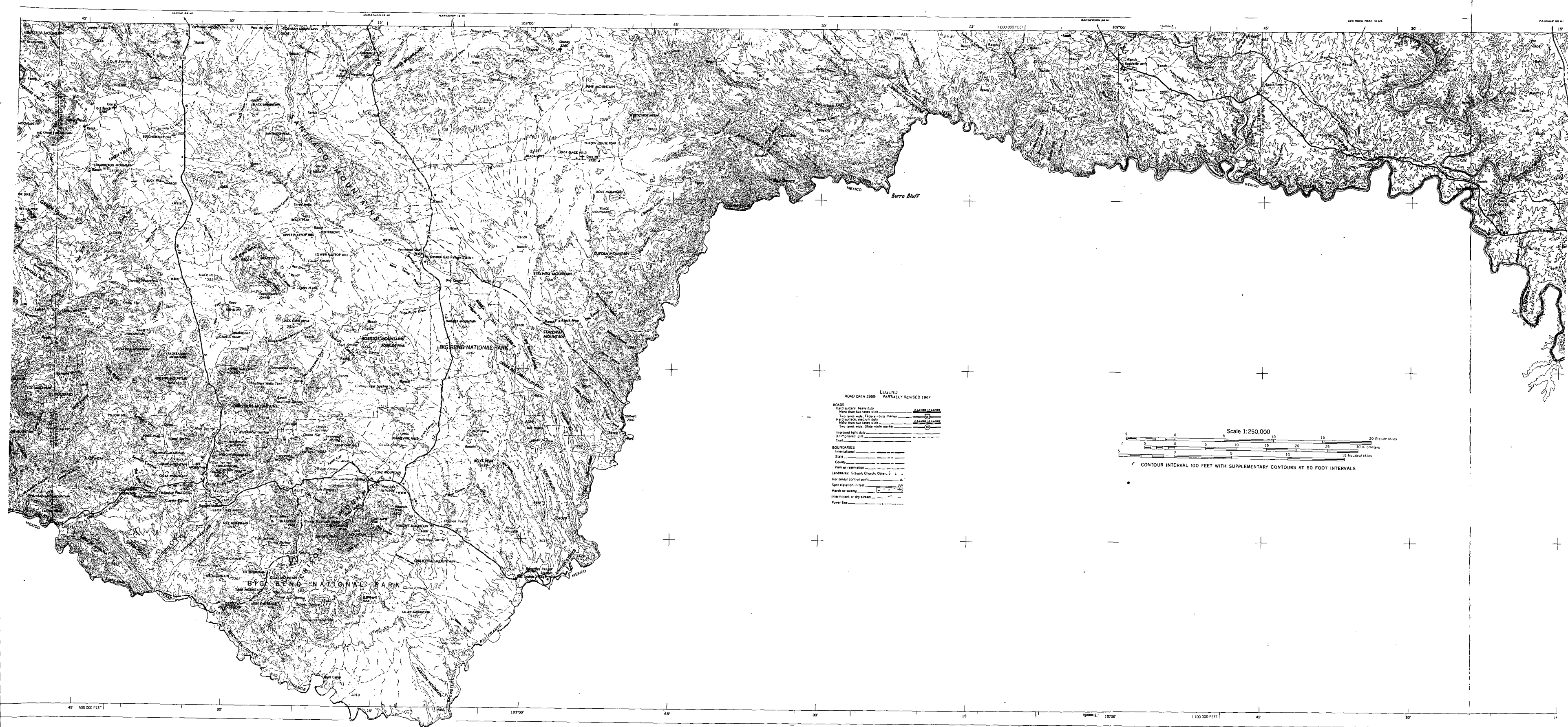
Plants and Animals Listed as Endangered or Threatened or Candidates
for Listing and Which are Expected to Occur in the Rio Grande
River (Texas) Wild and Scenic River Study Area

Scientific Name	Common Name	Status	Habitat
<u>PLANTS</u>			
<u>Brickellia shineri</u>	Shiner's Brickellia	Candidate for listing. Recommended by Smithsonian report as Threatened. Has definite botanical significance.	
<u>Cirsium turneri</u>	Cliff thistle	Candidate for listing. Recommended as Threatened by Smithsonian report. Endemic of Brewster County.	Bluffs at 3,100 feet in Maravillas Canyon.
<u>Emorya suaveolens</u>		Possible candidate for listing...Monotypic.	Maravillas Canyon.
<u>Epithelantha bokei</u>	Boke's button cactus	Candidate for listing. Recommended by Smithsonian report as Threatened. Commercially exploited.	Type locality is at 2,700 feet in Boquillas Canyon.
<u>Galium correllii</u>	Cliff bedstraw	Candidate for listing. Recommended by Smithsonian report as Threatened. Has no known close relatives.	Type locality is Eagle Nest (Langtry) Canyon just below study area.

Scientific Name	Common Name	Status	Habitat
<u>Polygala maravillasensis</u>	Maravillas milkwort	Candidate for listing. Recommended by Smithsonian report as Endangered. Has only 3 or 4 known populations.	Type locality is a mountain top west of Maravillas Creek about 2 miles from mouth of Maravillas Canyon
<u>ANIMALS</u>			
<u>Campostoma ornatum</u>	Mexican stoneroller	Possible candidate for Threatened listing.	Known from Terlingua Creek above study area.
<u>Notropis chihuahua</u>	Chihuahua Shiner	Candidate for Threatened or Endangered listing.	Known from Tornilla and Terlingua Creeks in Big Bend National Park. May occur in other creeks in the study area.
<u>Notropis simus</u>	Bluntnose Shiner	Candidate for Threatened or Endangered listing.	Known from the River proper, probably does not get into tributaries. May be extinct.
<u>Gambusia gaigei</u>	Big Bend Mosquitofish	On U.S. List of Endangered Species.	Known only from springs and pools in Big Bend National Park.
<u>Cyprinodon eximius</u>	Concho River pupfish	Possible candidate for Threatened listing.	Known from Terlingua Creek above study area. May also occur in clear flowing streams in study area.
<u>Pseudemys scripta gaigeae</u>	Big Bend Turtle	Possible candidate for Threatened listing. Found only in Brewster and Presidio Counties.	Rio Grande River--Big Bend National Park eastward to Laredo; Mexico.

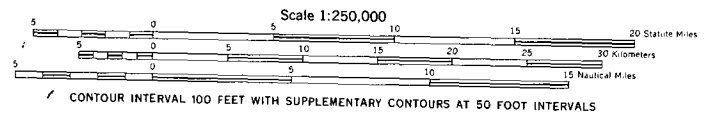
<u>Scientific Name</u>	<u>Common Name</u>	<u>Status</u>	<u>Habitat</u>
<u>Falco peregrinus anatum</u>	American peregrine	Endangered. Several active aeries in the study area on both sides of the river.	Nests on high cliffs and crags.
<u>Canis lupus baileyi</u>	Mexican wolf	Candidate for listing as Endangered. Notice of Proposed Rulemaking has been published. Not definitely known from the area at the present time, but has occurred in northern Brewster County in recent years.	Wide ranging.

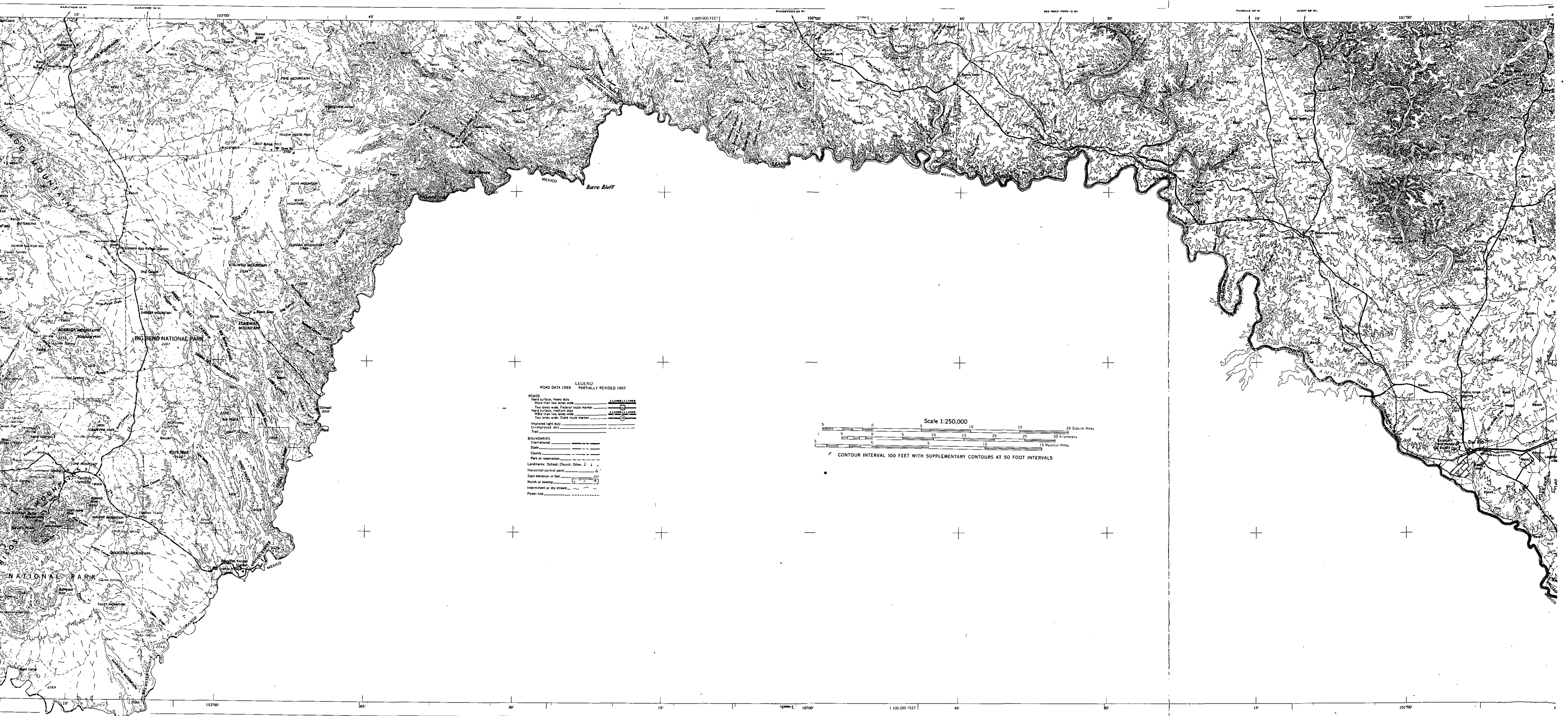




LEGEND
ROAD DATA 1959 PARTIALLY REVISED 1967

- ROADS
- Hard surface, heavy duty
- More than two lanes wide
- Two lanes wide, Federal route marker
- Hard surface, medium duty
- More than two lanes wide
- Two lanes wide, State route marker
- Improved light duty
- Unimproved dirt
- Trail
- BOUNDARIES
- International
- State
- County
- Park or reservation
- Landmarks: School, Church, Other
- Horizontal control point
- Spot elevation in feet
- Marsh or swam
- Intermittent or dry stream
- Power line





LEGEND PARTIALLY REVISED 1967
ROAD DATA 1959

ROADS
Hard surface, heavy duty
More than two lanes wide
Two lanes wide, Federal route marker
Hard surface, medium duty
More than two lanes wide
Two lanes wide, State route marker
Improved light duty
Unimproved dirt
Trail

BOUNDARIES
International
State
County
Park or reservation
Landmarks: School, Church, Other, etc.
Horizontal contour point
Spot elevation in feet
Marsh or swamp
Intermittent or dry stream
Power line

